SUBJECT INDEX

Abutments

Local Scour at Bridge Abutments, B. W. Melville, HY Apr. 92, p615-631.

Adaptive systems

Adaptive Parameter Estimation for Multisite Hydrologic Forecasting, Haitham M. Awwad and Juan B. Valdés, HY Sept. 92, p1201-1221.

Aeration

Uniform Aerated Chute Flow, Willi H. Hager, HY Apr. 91, p528-533.

Aerators

Air Entrainment by Spillway Aerators, Peter Rutschmann and Willi H. Hager, HY June 90, p765-782.

Aggradation

Aggradation-Degradation Process in Alluvial Channels, Chin-lien Yen, Shou-young Chang and Hong-Yuan Lee, HY Dec. 92, p1651-1669.

Air entrainment

Air Entrainment by Spillway Aerators, Peter Rutschmann and Willi H. Hager, HY June 90, p765-782.

Uniform Aerated Chute Flow, Willi H. Hager, HY Apr. 91, p528-533.

Air water interactions

Influence of Liquid Length Variation in Hydraulic Transients, Enrique Cabrera, José Abreu, Rafael Pérez and Antonio Vela, HY Dec. 92, p1639-1650.

Algorithms

Explicit Calculation of Pipe-Network Parameters, Paul F. Boulos and Don J. Wood, HY Nov. 90, p1329-1344.

Alluvial channels

Aggradation-Degradation Process in Alluvial Channels, Chin-lien Yen, Shou-young Chang and Hong-Yuan Lee, HY Dec. 92, p1651-1669.

Development of Bed Features, Arved J. Raudkivi and Hans-H. Witte, HY Sept. 90, p1063-1079.

First Step Away from Lacey's Regime Equations, Michael A. Stevens and Carl F. Nordin, Jr., HY Nov. 90, p1422-1425.

Note on Lag in Bedload Discharge, Subhash C. Jain, HY June 92, p904-917.

Alluvial fans

Preferred Directions of Flow on Alluvial Fans, Richard H. French, HY July 92, p1002-1013.

Alluvial streams

Bed-Load Coefficients, Raul Pacheco-Ceballos, HY Oct. 92, p1436-1442.

Development of Bed Features, Arved J. Raudkivi and Hans-H. Witte, HY Sept. 90, p1063-1079.

Incipient Motion during Static Armoring, Anders Wörman, HY Mar. 92, p496-501.

Menu of Coupled Velocity and Sediment-Discharge Relations for Rivers, M. Fazle Karim and John F. Kennedy, HY Aug. 90, p978-996.

Sediment Management with Submerged Vanes. II: Applications, A. Jacob Odgaard and Yalin Wang, HY Mar. 91, p284-302.

Alluvium

Boundary Shear Stress and Roughness Over Mobile Alluvial Beds, Peter J. Whiting and William E. Dietrich, HY Dec. 90, p1495-1511.

Mean Size Distribution of Bed Load on Goodwin Creek, Roger A. Kuhnle and Joe C. Willis, HY Oct. 92, p1443-1446.

Analysis

Lagrangian Solution of St. Venant's Equations for Alluvial Estuary, Hubert H. G. Savenije, HY Aug. 92, p1153-1163.

Optimum Location of Drains in Concrete Dams, A. S. Chawla, R. K. Thakur and Akhilesh Kumar, HY July 90, p930-943.

State-Space Analysis and Control of Slow Transients in Pipes, Masashi Shimada, HY Sept. 92, p1287-1304.

Tide and Storm Surge Predictions Using Finite Element Model, J. J. Westerink, R. A. Luettich, A. M. Baptista, N. W. Scheffner and P. Farrar, HY Oct. 92, p1373-1390.

Anemometers

Velocity Profiles in Steep Open-Channel Flows, Akihiro Tominaga and Iehisa Nezu, HY Jan. 92, p73-90.

Aquatic habitats

Sediment and Aquatic Habitat in River Systems, ASCE Task Committee on Sediment Transport and Aquatic Habitats, Sedimentation Committee, HY May 92, p669-687.

Aquifers

Type Curves for a Slug Test in an Infinitely or Semi-infinitely Thick Aquifer, Gary R. Chirlin, (*Symposium on Ground Water*, Gerard P. Lennon, ed. and Shakrokh Rouhani, ed., 1991), p169-174.

Arid lands

New Look at Regional Flood-Frequency Relations for Arid Lands, Hjalmar W. Hjalmarson and Blakemore E. Thomas, HY June 92, p868-886.

Preferred Directions of Flow on Alluvial Fans, Richard H. French, HY July 92, p1002-1013.

ASCE Awards & Prizes

Future Trends and Needs in Hydraulics, Daryl B. Simons, HY Dec. 92, p1607-1620.

Automation

Wave-Motion Stability in Canals with Automatic Controllers, Simion Hancu and Paul Dan, HY Dec. 92, p1621-1638.

Bank erosion

Sediment Management with Submerged Vanes. II: Applications, A. Jacob Odgaard and Yalin Wang, HY Mar. 91, p284-302.

Bank stabilization

Hydraulic Geometry of Threshold Channels, Panayiotis Diplas and Gregorio Vigilar, HY Apr. 92, p597-614.

Predicting Influence of Bank Vegetation on Channel Capacity, Richard Masterman and Colin R. Thorne, HY July 92, p1052-1058.

Basins

HGL Elevation at Pipe Exit of USBR Type VI Impact Basin, Charles E. Rice and Kem C. Kadavy, HY July 91, p929-933.

Bays

Effects of Sea-Level Rise on Bays and Estuaries, ASCE Task Committee on Sea-Level Rise and Its Effects on Bays and Estuaries, HY Jan. 92, p1-10.

Beaches

Laboratory Investigation of Beach Profiles in Tailings Disposal, Xiaosheng Fan and Jacob Masliyah, HY Nov. 90, p1357-1373.

Beams

Vibration of Beams and Trashracks in Parallel and Inclined Flows, Thang D. Nguyen and Eduard Naudascher, HY Aug. 91, p1056-1076.

Bed load

Bed-Load and Suspended-Load Transport of Nonuniform Sediments, Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY June 91, p774-787.

Bed-Load Coefficients, Raul Pacheco-Ceballos, HY Oct. 92, p1436-1442.

Cohesionless Fine-Sediment Bed Forms in Shallow Flows, Peter A. Mantz, HY May 92, p743-764.

Mean Size Distribution of Bed Load on Goodwin Creek, Roger A. Kuhnle and Joe C. Willis, HY Oct. 92, p1443-1446.

Motion of Contact-Load Particles at High Shear Stress, Fidelia N. Nnadi and Kenneth C. Wilson, HY Dec. 92, p1670-1684.

Note on Lag in Bedload Discharge, Subhash C. Jain, HY June 92, p904-917.

Prediction Method for Local Scour by Warmed Cooling-Water Jets, S. Ushijima, T. Shimizu, A. Sasaki and Y. Takizawa, HY Aug. 92, p1164-1183.

Bed load movement

Bed-Load Coefficients, Raul Pacheco-Ceballos, HY Oct. 92, p1436-1442.

Bed-Load Transport on Transverse Slope. I, Masato Sekine and Gary Parker, HY Apr. 92, p513-535.

Boundary Shear Stress and Roughness Over Mobile Alluvial Beds, Peter J. Whiting and William E. Dietrich, HY Dec. 90, p1495-1511.

Conceptual Bed-Load Transport Model and Verification for Sediment Mixtures, Shaohua Marko Hsu and Forrest M. Holly, Jr., HY Aug. 92, p1135-1152.

Mechanics of Saltating Grains. II, Masato Sekine and Hideo Kikkawa, HY Apr. 92, p536-558.

New Total Sediment-Load Sampler, Leo C. van Rijn and Moustafa T. K. Gaweesh, HY Dec. 92, p1686-1691.

Bed material

Properties of Various Sediment Sampling Procedures, Panayiotis Diplas and Jon B. Fripp, HY July 92, p955-970.

Routing of Heterogeneous Sediments over Movable Bed: Model Development, Andre van Niekerk, Koen R. Vogel, Rudy L. Slingerland and John S. Bridge, HY Feb. 92, p246-262.

Routing of Heterogeneous Sediments over Movable Bed: Model Verification, Koen R. Vogel, Andre van Niekerk, Rudy L. Slingerland and John S. Bridge, HY Feb. 92, p263-279.

Sediment and Aquatic Habitat in River Systems, ASCE Task Committee on Sediment Transport and Aquatic Habitats, Sedimentation Committee, HY May 92, p669-687.

Bed movements

Boundary Shear Stress and Roughness Over Mobile Alluvial Beds, Peter J. Whiting and William E. Dietrich, HY Dec. 90, p1495-1511.

Motion of Contact-Load Particles at High Shear Stress, Fidelia N. Nnadi and Kenneth C. Wilson, HY Dec. 92, p1670-1684.

Bed ripples

Development of Bed Features, Arved J. Raudkivi and Hans-H. Witte, HY Sept. 90, p1063-1079.

Flow Field Induced by Sea Waves Over Brick-Pattern Ripples, G. Vittori, HY Sept. 92, p1241-1259.

Bedforms

Entrainment of Bed Sediment Into Suspension, Marcelo Garcia and Gary Parker, HY Apr. 91, p414-435.

Flow Field Induced by Sea Waves Over Brick-Pattern Ripples, G. Vittori, HY Sept. 92, p1241-1259.

Hyperconcentrated Sand-Water Mixture Flows over Erodible Bed, Johan C. Winterwerp, Willem T. Bakker, Dick R. Mastbergen and Henk van Rossum, HY Nov. 92, p1508-1525.

Beds

Development of Bed Features, Arved J. Raudkivi and Hans-H. Witte, HY Sept. 90, p1063-1079.

Effects of Porous Bed on Turbulent Stream Flow above Bed, Cesar Mendoza and Donghuo Zhou, HY Sept. 92, p1222-1240.

Modeling Channel Bed Transients Using Explicit F-D Schemes, B. Morse and R. D. Townsend, HY Nov. 90, p1345-1356.

Bifurcations

Nonlinear Stability of Differential Surge Chambers, Xiao-Liang Yang and Chen-Shan Kung, HY Nov. 92, p1526-1539.

Boundary layer

Controlling Mechanism of Local Scouring, Bijan Dargahi, HY Oct. 90, p1197-1214.

Flow Field Induced by Sea Waves Over Brick-Pattern Ripples, G. Vittori, HY Sept. 92, p1241-1259.

Velocity Distribution in Uniform Sediment-Laden Flow, Motohiko Umeyama and Franciscus Gerritsen, HY Feb. 92, p229-245.

Boundary shear

Cohesionless Fine-Sediment Bed Forms in Shallow Flows, Peter A. Mantz, HY May 92, p743-764.

Bridge failure

Assessing Time-Variant Bridge Reliability Due to Pier Scour, Peggy A. Johnson and Bilal M. Ayyub, HY June 92, p887-903.

Reliability-Based Pier Scour Engineering, Peggy A. Johnson, HY Oct. 92, p1344-1358.

Bridges

Assessing Time-Variant Bridge Reliability Due to Pier Scour, Peggy A. Johnson and Bilal M. Ayyub, HY June 92, p887-903.

Effects of Footing Location on Bridge Pier Scour, J. Sterling Jones, Roger T. Kilgore and Mark P. Mistichelli, HY Feb. 92, p280-290.

Local Scour at Bridge Abutments, B. W. Melville, HY Apr. 92, p615-631.

Bridges, piers

Bridge Pier Scour with Debris Accumulation, Bruce W. Melville and D. M. Dongol, HY Sept. 92, p1306-1310.

Reliability-Based Pier Scour Engineering, Peggy A. Johnson, HY Oct. 92, p1344-1358.

Scour Protection at Bridge Piers, Yee-Meng Chiew, HY Sept. 92, p1260-1269.

Study of Time-Dependent Local Scour Around Bridge Piers, A. Melih Yanmaz and H. Doğan Altınbilek, HY Oct. 91, p1247-1268.

Bubbles

Destruction of Stratification By Bubble Plume, W. D. Baines and A. M. Leitch, HY Apr. 92, p559-577.

Calibration

Calibration Strategy for Urban Catchment Parameters, Yaacob Ibrahim and Shie-Yui Liong, HY Nov. 92, p1550-1570.

Explicit Calculation of Pipe-Network Parameters, Paul F. Boulos and Don J. Wood, HY Nov. 90, p1329-1344.

Canal design

First Step Away from Lacey's Regime Equations, Michael A. Stevens and Carl F. Nordin, Jr., HY Nov. 90, p1422-1425.

Canals

First Step Away from Lacey's Regime Equations, Michael A. Stevens and Carl F. Nordin, Jr., HY Nov. 90, p1422-1425.

Wave-Motion Stability in Canals with Automatic Controllers, Simion Hancu and Paul Dan, HY Dec. 92, p1621-1638.

Capacity

Predicting Influence of Bank Vegetation on Channel Capacity, Richard Masterman and Colin R. Thorne, HY July 92, p1052-1058.

Suspended Sediment-Transport Capacity for Open Channel Flow, Ismail Celik and Wolfgang Rodi, HY Feb. 91, p191-204.

Catchments

Calibration Strategy for Urban Catchment Parameters, Yaacob Ibrahim and Shie-Yui Liong, HY Nov. 92, p1550-1570.

Cavitation

Air Entrainment by Spillway Aerators, Peter Rutschmann and Willi H. Hager, HY June 90, p765-782.

Influence of Liquid Length Variation in Hydraulic Transients, Enrique Cabrera, José Abreu, Rafael Pérez and Antonio Vela, HY Dec. 92, p1639-1650.

Channel beds

Modeling Channel Bed Transients Using Explicit F-D Schemes, B. Morse and R. D. Townsend, HY Nov. 90, p1345-1356.

Velocity Profiles in Steep Open-Channel Flows, Akihiro Tominaga and Iehisa Nezu, HY Jan. 92, p73-90.

Channel design

Flow Resistance of Riprap, Stephen T. Maynord, HY June 91, p687-696.

Predicting Influence of Bank Vegetation on Channel Capacity, Richard Masterman and Colin R. Thorne, HY July 92, p1052-1058.

Channel erosion

River Bed Degradation Due to Abrupt Outfall Lowering, C. W. Lenau and A. T. Hjelmfelt, Jr., HY June 92, p918-933.

Channel flow

Dimensionally Homogeneous Manning's Formula, Ben Chie Yen, HY Sept. 92, p1326-1332.

Predicting Influence of Bank Vegetation on Channel Capacity, Richard Masterman and Colin R. Thorne, HY July 92, p1052-1058.

Channels, waterways

Calculation of Total Conveyance in Natural Channels, J. Garbrecht and G. O. Brown, HY June 91, p788-798.

Cohesionless Fine-Sediment Bed Forms in Shallow Flows, Peter A. Mantz, HY May 92, p743-764.

Hydraulic Geometry of Threshold Channels, Panayiotis Diplas and Gregorio Vigilar, HY Apr. 92, p597-614.

Uniform Aerated Chute Flow, Willi H. Hager, HY Apr. 91, p528-533.

Characteristics

Characteristic Dissipative Galerkin Scheme for Open-Channel Flow, F. E. Hicks and P. M. Steffler, HY Feb. 92, p337-352.

China, People's Republic of

Reservoir Sedimentation. I: Delta and Density Current Deposits, Jiahua Fan and Gregory L. Morris, HY Mar. 92, p354-369.

Reservoir Sedimentation. II: Reservoir Desiltation and Long-Term Storage Capacity, Jiahua Fan and Gregory L. Morris, HY Mar. 92, p370-384.

Cities
Effect of Drought on Urban Water Supplies. I: Drought Analysis, David M. Frick, Dennis Bode and Jose D. Salas, HY June 90, p733-753.

Climatic changes
Effects of Sea-Level Rise on Bays and Estuaries, ASCE Task Committee on Sea-Level Rise and Its Effects on Bays and Estuaries, HY Jan. 92, p1-10.

Coastal engineering
Diffusion and Dispersion in Coastal Waters, E. John List, Gregory Gartrell and Clinton D. Winant, HY Oct. 90, p1158-1179.

Flow Field Induced by Sea Waves Over Brick-Pattern Ripples, G. Vittori, HY Sept. 92, p1241-1259.

Coefficients
Bed-Load Coefficients, Raul Pacheco-Ceballos, HY Oct. 92, p1436-1442.

Confidence Interval for Design Floods with Estimated Skew Coefficient, Jahir Uddin Chowdhury and Jery R. Stedinger, HY July 91, p811-831.

Momentum and Energy Coefficients Based on Power-Law Velocity Profile, Cheng-lung Chen, HY Nov. 92, p1571-1584.

Cohesive sediment
Measurement and Prediction of Surface Shear Stress in Annular Flume, D. I. Graham, P. W. James, T. E. R. Jones, J. M. Davies and E. A. Delo, HY Sept. 92, p1270-1286.

Collision models
Mechanics of Saltating Grains. II, Masato Sekine and Hideo Kikkawa, HY Apr. 92, p536-558.

Colorado
Effect of Drought on Urban Water Supplies. I: Drought Analysis, David M. Frick, Dennis Bode and Jose D. Salas, HY June 90, p733-753.

Computation
1-D Open-Channel Flow Simulation Using TVD-McCormack Scheme, P. García-Navarro, F. Alcrudo and J. M. Savirón, HY Oct. 92, p1359-1372.

Calculation of Total Conveyance in Natural Channels, J. Garbrecht and G. O. Brown, HY June 91, p788-798.

Conceptual Bed-Load Transport Model and Verification for Sediment Mixtures, Shaohua Marko Hsu and Forrest M. Holly, Jr., HY Aug. 92, p1135-1152.

Efficient Calculation of Transient Flow in Simple Pipe Networks, Bryan W. Karney and Duncan McInnis, HY July 92, p1014-1030.

Temporal Variation of Scour Around Circular Bridge Piers, Umesh C. Kothyari, Ramchandra J. Garde and Kittur G. Ranga Raju, HY Aug. 92, p1091-1106.

Computer applications
Efficient Calculation of Transient Flow in Simple Pipe Networks, Bryan W. Karney and Duncan McInnis, HY July 92, p1014-1030.

EQSWP: Extended Unsteady-Flow Double-Sweep Equation Solver, Theodor Strelkoff, HY May 92, p735-742.

Solving Turbulent Flows Using Finite Elements, John I. Finnie and Roland W. Jeppson, HY Nov. 91, p1513-1530.

Computerized simulation
Routing Debris Flows with Particle Segregation, Tamotsu Takahashi, Hajime Nakagawa, Tatsuo Harada and Yousuke Yamashiki, HY Nov. 92, p1490-1507.

Confidence intervals
Confidence Interval for Design Floods with Estimated Skew Coefficient, Jahir Uddin Chowdhury and Jery R. Stedinger, HY July 91, p811-831.

Control systems
Study of Open-Channel Dynamics as Controlled Process, Yuri A. Ermolin, HY Jan. 92, p59-72.

Wave-Motion Stability in Canals with Automatic Controllers, Simion Hancu and Paul Dan, HY Dec. 92, p1621-1638.

Control theory
State-Space Analysis and Control of Slow Transients in Pipes, Masashi Shimada, HY Sept. 92, p1287-1304.

Cooling water
Prediction Method for Local Scour by Warmed Cooling-Water Jets, S. Ushijima, T. Shimizu, A. Sasaki and Y. Takizawa, HY Aug. 92, p1164-1183.

Use of Density Current to Modify Thermal Structure of TVA Reservoirs, Vahid Alavian and Pete Ostrowski, Jr., HY May 92, p688-706.

Correlation analysis
Suspended Sediment-Transport Capacity for Open Channel Flow, Ismail Celik and Wolfgang Rodi, HY Feb. 91, p191-204.

Cost effectiveness
Design-Basis Flood for Rehabilitation of Existing Dams, Anand Prakash, HY Feb. 92, p291-305.

Crushing
Drag Coefficient and Fall Velocity of Nonspherical Particles, Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY May 91, p660-667.

Currents
Diffusion and Dispersion in Coastal Waters, E. John List, Gregory Gartrell and Clinton D. Winant, HY Oct. 90, p1158-1179.

Dam safety
Design-Basis Flood for Rehabilitation of Existing Dams, Anand Prakash, HY Feb. 92, p291-305.

Dams
Design-Basis Flood for Rehabilitation of Existing Dams, Anand Prakash, HY Feb. 92, p291-305.

Drownproofing of Low Overflow Structures, Hans J. Leutheusser and Warren M. Birk, HY Feb. 91, p205-213.

Dams, concrete

Optimum Location of Drains in Concrete Dams, A. S. Chawla, R. K. Thakur and Akhilesh Kumar, HY July 90, p930-943.

Darcy's law

Conversion Between Quadratic and Power Law for Non-Darcy Flow, G. H. George and D. Hansen, HY May 92, p792-797.

Debris

Bridge Pier Scour with Debris Accumulation, Bruce W. Melville and D. M. Dongol, HY Sept. 92, p1306-1310.

Routing Debris Flows with Particle Segregation, Tamotsu Takahashi, Hajime Nakagawa, Tatsuo Harada and Yousuke Yamashiki, HY Nov. 92, p1490-1507.

Trash Rack Blockage in Supercritical Flow, Steven R. Abt, Thomas E. Brisbane, David M. Frick and Charles A. McKnight, HY Dec. 92, p1692-1696.

Degradation

Aggradation-Degradation Process in Alluvial Channels, Chin-lien Yen, Shou-young Chang and Hong-Yuan Lee, HY Dec. 92, p1651-1669.

Delphi method

Design-Basis Flood for Rehabilitation of Existing Dams, Anand Prakash, HY Feb. 92, p291-305.

Density currents

Density Currents and Shear-Induced Flocculation in Sedimentation Tanks, D. A. Lyn, A. I. Stamou and W. Rodi, HY June 92, p849-867.

Density Currents Entering Lakes and Reservoirs, Vahid Alavian, Gerhard H. Jirka, Richard A. Denton, Marc C. Johnson and Heinz G. Stefan, HY Nov. 92, p1464-1489.

Reservoir Sedimentation. II: Reservoir Desiltation and Long-Term Storage Capacity, Jiahua Fan and Gregory L. Morris, HY Mar. 92, p370-384.

Use of Density Current to Modify Thermal Structure of TVA Reservoirs, Vahid Alavian and Pete Ostrowski, Jr., HY May 92, p688-706.

Density stratification

Density Currents Entering Lakes and Reservoirs, Vahid Alavian, Gerhard H. Jirka, Richard A. Denton, Marc C. Johnson and Heinz G. Stefan, HY Nov. 92, p1464-1489.

Modeling of Rectangular Settling Tanks, Siping Zhou and John A. McCorquodale, HY Oct. 92, p1391-1405.

Design

Bridge Pier Scour with Debris Accumulation, Bruce W. Melville and D. M. Dongol, HY Sept. 92, p1306-1310.

Flow and Energy Dissipation Over Stepped Gabion Weirs, L. Peyras, P. Royet and G. Degoutte, HY May 92, p707-717.

Local Scour at Bridge Abutments, B. W. Melville, HY Apr. 92, p615-631.

Reliability-Based Pier Scour Engineering, Peggy A. Johnson, HY Oct. 92, p1344-1358.

Design criteria

Confidence Interval for Design Floods with Estimated Skew Coefficient, Jahir Uddin Chowdhury and Jery R. Stedinger, HY July 91, p811-831.

Fluctuating Uplift and Lining Design in Spillway Stilling Basins, Virgilio Fiorotto and Andrea Rinaldo, HY Apr. 92, p578-596.

Pipe Plunge Pool Energy Dissipator, Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323.

Short-Duration Rainfalls in Sicily, Giovanni B. Ferreri and Vito Ferro, HY Mar. 90, p430-435.

Detention reservoirs

Preliminary Sizing of Detention Reservoirs to Reduce Peak Discharges, Bruce M. McEnroe, HY Nov. 92, p1540-1549.

Differential equations

Study of Open-Channel Dynamics as Controlled Process, Yuri A. Ermolin, HY Jan. 92, p59-72.

Diffusion

Diffusion and Dispersion in Coastal Waters, E. John List, Gregory Gartrell and Clinton D. Winant, HY Oct. 90, p1158-1179.

Kinematic Wave Controversy, Victor M. Ponce, HY Apr. 91, p511-525.

Diffusion coefficient

Vertical Distribution of Suspended Sediment in Uniform Open-Channel Flow, Motohiko Umeyama, HY June 92, p936-941.

Dimensional analysis

Cohesionless Fine-Sediment Bed Forms in Shallow Flows, Peter A. Mantz, HY May 92, p743-764.

Discharge

Analysis of Spiral Vortex and Vertical Slot Vortex Drop Shafts, Michael C. Quick, HY Mar. 90, p309-325.

Discharge Capacity for Curb-Opening Inlets, Ali Uyumaz, HY July 92, p1048-1051.

Discharge measurement

Dividing Flow in Open Channels, Amruthur S. Ramamurthy, Duc Minh Tran and Luis B. Carballada, HY Mar. 90, p449-455.

Dispersion

Diffusion and Dispersion in Coastal Waters, E. John List, Gregory Gartrell and Clinton D. Winant, HY Oct. 90, p1158-1179.

Longitudinal Dispersion Coefficients in Estuary, I. Guymer and J. R. West, HY May 92, p718-734.

Mixing, Dispersion, and Resuspension in Vicinity of Ocean Wastewater Plume, Libe Washburn, Burton H. Jones, Alan Bratkovich, T. D. Dickey and Ming-Sue Chen, HY Jan. 92, p38-58.

Dissipation

Characteristic Dissipative Galerkin Scheme for Open-Channel Flow, F. E. Hicks and P. M. Steffler, HY Feb. 92, p337-352.

Distribution
Mean Size Distribution of Bed Load on Goodwin Creek, Roger A. Kuhnle and Joe C. Willis, HY Oct. 92, p1443-1446.

Vertical Sediment Distribution, Jin Ren Ni and Guang Qian Wang, HY Sept. 91, p1184-1194.

Division
Dividing Flow in Open Channels, Amruthur S. Ramamurthy, Duc Minh Tran and Luis B. Carballada, HY Mar. 90, p449-455.

Doppler systems
Velocity Profiles in Steep Open-Channel Flows, Akihiro Tominaga and Iehisa Nezu, HY Jan. 92, p73-90.

Drag
Bed-Load Transport on Transverse Slope. I, Masato Sekine and Gary Parker, HY Apr. 92, p513-535.

Drag coefficient
Drag Coefficient and Fall Velocity of Nonspherical Particles, Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY May 91, p660-667.

Drainage
Discharge Capacity for Curb-Opening Inlets, Ali Uyumaz, HY July 92, p1048-1051.

Drainage systems
Dividing Flow in Open Channels, Amruthur S. Ramamurthy, Duc Minh Tran and Luis B. Carballada, HY Mar. 90, p449-455.

Short-Duration Rainfalls in Sicily, Giovanni B. Ferreri and Vito Ferro, HY Mar. 90, p430-435.

Drains
Optimum Location of Drains in Concrete Dams, A. S. Chawla, R. K. Thakur and Akhilesh Kumar, HY July 90, p930-943.

Drogues
Diffusion and Dispersion in Coastal Waters, E. John List, Gregory Gartrell and Clinton D. Winant, HY Oct. 90, p1158-1179.

Drop structures
Analysis of ARS Low-Drop Grade-Control Structure, Steven R. Abt, Mark R. Peterson, Chester C. Watson and Scott A. Hogan, HY Oct. 92, p1424-1434.

Analysis of Spiral Vortex and Vertical Slot Vortex Drop Shafts, Michael C. Quick, HY Mar. 90, p309-325.

Scour Downstream of Grade-Control Structures, Noel E. Bormann and Pierre Y. Julien, HY May 91, p579-594.

Droughts
Effect of Drought on Urban Water Supplies. I: Drought Analysis, David M. Frick, Dennis Bode and Jose D. Salas, HY June 90, p733-753.

Dunes
Development of Bed Features, Arved J. Raudkivi and Hans-H. Witte, HY Sept. 90, p1063-1079.

Dynamic response
Vibration of Beams and Trashracks in Parallel and Inclined Flows, Thang D. Nguyen and Eduard Naudascher, HY Aug. 91, p1056-1076.

Dynamics
Bed-Load Transport on Transverse Slope. I, Masato Sekine and Gary Parker, HY Apr. 92, p513-535.

Study of Open-Channel Dynamics as Controlled Process, Yuri A. Ermolin, HY Jan. 92, p59-72.

Eddy viscosity
Vertical Distribution of Suspended Sediment in Uniform Open-Channel Flow, Motohiko Umeyama, HY June 92, p936-941.

Elevation
HGL Elevation at Pipe Exit of USBR Type VI Impact Basin, Charles E. Rice and Kem C. Kadavy, HY July 91, p929-933.

Empirical equations
Bed-Load and Suspended-Load Transport of Nonuniform Sediments, Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY June 91, p774-787.

Energy
Momentum and Energy Coefficients Based on Power-Law Velocity Profile, Cheng-lung Chen, HY Nov. 92, p1571-1584.

Energy dissipaters
Pipe Plunge Pool Energy Dissipator, Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323.

Energy dissipation
Analysis of ARS Low-Drop Grade-Control Structure, Steven R. Abt, Mark R. Peterson, Chester C. Watson and Scott A. Hogan, HY Oct. 92, p1424-1434.

Analysis of Spiral Vortex and Vertical Slot Vortex Drop Shafts, Michael C. Quick, HY Mar. 90, p309-325.

Flow and Energy Dissipation Over Stepped Gabion Weirs, L. Peyras, P. Royet and G. Degoutte, HY May 92, p707-717.

Skimming Flow in Stepped Spillways, N. Rajaratnam, HY Apr. 90, p587-591.

Energy losses
Head Losses in Storm Sewer Manholes: Submerged Jet Theory, Flemming Bo Pedersen and Ole Mark, HY Nov. 90, p1317-1328.

Entrainment
Entrainment of Bed Sediment Into Suspension, Marcelo Garcia and Gary Parker, HY Apr. 91, p414-435.

Head Losses in Storm Sewer Manholes: Submerged Jet Theory, Flemming Bo Pedersen and Ole Mark, HY Nov. 90, p1317-1328.

Note on Lag in Bedload Discharge, Subhash C. Jain, HY June 92, p904-917.

Entropy
Entropy-Based Redundancy Measures in Water-Distribution Networks, Kofi Awumah, Ian Goulter and Suresh K. Bhatt, HY May 91, p595-614.

Variation of Velocity Distribution along Nonuniform Open-Channel Flow, Chao-Lin Chiu and David W. Murray, HY July 92, p989-1001.

Environmental impacts

Sediment and Aquatic Habitat in River Systems, ASCE Task Committee on Sediment Transport and Aquatic Habitats, Sedimentation Committee, HY May 92, p669-687.

Environmental issues

Future Trends and Needs in Hydraulics, Daryl B. Simons, HY Dec. 92, p1607-1620.

Pipe Plunge Pool Energy Dissipator, Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323.

Equations of motion

Comparative Survey of Four Unsaturated Soil Flow Equations, Abbas A. Fiuzat and David W. Moughton, HY May 92, p786-791.

Fully Coupled Unsteady Mobile Boundary Flow Model (FCM), Luís R.P. Correia, Bommanna G. Krishnappan and Walter H. Graf, HY Mar. 92, p476-494.

Erosion

Bed-Load Coefficients, Raul Pacheco-Ceballos, HY Oct. 92, p1436-1442.

Bridge Pier Scour with Debris Accumulation, Bruce W. Melville and D. M. Dongol, HY Sept. 92, p1306-1310.

Controlling Mechanism of Local Scouring, Bijan Dargahi, HY Oct. 90, p1197-1214.

Effect of Spoilers on Scour at Submarine Pipelines, Yee-Meng Chiew, HY Sept. 92, p1311-1317.

Effects of Sea-Level Rise on Bays and Estuaries, ASCE Task Committee on Sea-Level Rise and Its Effects on Bays and Estuaries, HY Jan. 92, p1-10.

Hyperconcentrated Sand-Water Mixture Flows over Erodible Bed, Johan C. Winterwerp, Willem T. Bakker, Dick R. Mastbergen and Henk van Rossum, HY Nov. 92, p1508-1525.

Incipient Motion during Static Armoring, Anders Wörman, HY Mar. 92, p496-501.

Local Scour at Bridge Abutments, B. W. Melville, HY Apr. 92, p615-631.

Routing Debris Flows with Particle Segregation, Tamotsu Takahashi, Hajime Nakagawa, Tatsuo Harada and Yousuke Yamashiki, HY Nov. 92, p1490-1507.

Scour Downstream of Grade-Control Structures, Noel E. Bormann and Pierre Y. Julien, HY May 91, p579-594.

Scour Protection at Bridge Piers, Yee-Meng Chiew, HY Sept. 92, p1260-1269.

Erosion control

Scour Protection at Bridge Piers, Yee-Meng Chiew, HY Sept. 92, p1260-1269.

Sediment Management with Submerged Vanes. II: Applications, A. Jacob Odgaard and Yalin Wang, HY Mar. 91, p284-302.

Estimating

Confidence Interval for Design Floods with Estimated Skew Coefficient, Jahir Uddin Chowdhury and Jery R. Stedinger, HY July 91, p811-831.

Estimation

Review of Geostatistics in Geohydrology: I. Basic Concepts, ASCE Task Committee on Geostatistical Techniques in Geohydrology of the Ground Water Hydrology Committee of the ASCE Hydraulics Division, HY May 90, p612-632.

Estuaries

Effects of Sea-Level Rise on Bays and Estuaries, ASCE Task Committee on Sea-Level Rise and Its Effects on Bays and Estuaries, HY Jan. 92, p1-10.

Lagrangian Solution of St. Venant's Equations for Alluvial Estuary, Hubert H. G. Savenije, HY Aug. 92, p1153-1163.

Longitudinal Dispersion Coefficients in Estuary, I. Guymer and J. R. West, HY May 92, p718-734.

Proposed Similarity Law for Surface Velocity in Hydraulic Models, Dajin Yu and Weijun Zhao, HY Sept. 92, p1318-1325.

Experimental data

Entrainment of Bed Sediment Into Suspension, Marcelo Garcia and Gary Parker, HY Apr. 91, p414-435.

Experimentation

Measurement and Prediction of Surface Shear Stress in Annular Flume, D. I. Graham, P. W. James, T. E. R. Jones, J. M. Davies and E. A. Delo, HY Sept. 92, p1270-1286.

Falling bodies

Drag Coefficient and Fall Velocity of Nonspherical Particles, Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY May 91, p660-667.

Feedback control

Wave-Motion Stability in Canals with Automatic Controllers, Simion Hancu and Paul Dan, HY Dec. 92, p1621-1638.

Field investigations

Hyperconcentrated Sand-Water Mixture Flows over Erodible Bed, Johan C. Winterwerp, Willem T. Bakker, Dick R. Mastbergen and Henk van Rossum, HY Nov. 92, p1508-1525.

Field tests

Frictional Resistance of Overland Flow on Tropical Turfed Slope, Yee-Meng Chiew and Soon-Keat Tan, HY Jan. 92, p92-97.

Longitudinal Dispersion Coefficients in Estuary, I. Guymer and J. R. West, HY May 92, p718-734.

Sediment Management with Submerged Vanes. II: Applications, A. Jacob Odgaard and Yalin Wang, HY Mar. 91, p284-302.

Finite difference method

Modeling Channel Bed Transients Using Explicit F-D Schemes, B. Morse and R. D. Townsend, HY Nov. 90, p1345-1356.

Two-Dimensional Leachate Estimation through Landfills, Shabbir Ahmed, Reza M. Khanbilvardi, John Fillos and Phillip J. Gleason, HY Feb. 92, p306-322.

Finite differences

The Hopscotch Algorithm for Three-Dimensional Simulation, Geneviève Ségol, HY Mar. 92, p385-406.

Finite element method

Characteristic Dissipative Galerkin Scheme for Open-Channel Flow, F. E. Hicks and P. M. Steffler, HY Feb. 92, p337-352.

Solving Turbulent Flows Using Finite Elements, John I. Finnie and Roland W. Jeppson, HY Nov. 91, p1513-1530.

Finite elements

Calculation of Total Conveyance in Natural Channels, J. Garbrecht and G. O. Brown, HY June 91, p788-798.

Tide and Storm Surge Predictions Using Finite Element Model, J. J. Westerink, R. A. Luettich, A. M. Baptista, N. W. Scheffner and P. Farrar, HY Oct. 92, p1373-1390.

Flash floods

Preferred Directions of Flow on Alluvial Fans, Richard H. French, HY July 92, p1002-1013.

Flocculation

Density Currents and Shear-Induced Flocculation in Sedimentation Tanks, D. A. Lyn, A. I. Stamou and W. Rodi, HY June 92, p849-867.

Flood control

Drownproofing of Low Overflow Structures, Hans J. Leutheusser and Warren M. Birk, HY Feb. 91, p205-213.

Preliminary Sizing of Detention Reservoirs to Reduce Peak Discharges, Bruce M. McEnroe, HY Nov. 92, p1540-1549.

Flood damage

Design-Basis Flood for Rehabilitation of Existing Dams, Anand Prakash, HY Feb. 92, p291-305.

Flood forecasting

Separation of Skewness: Reality or Regional Artifact? Fahim Ashkar, Bernard Bobée and Jacques Bernier, HY Mar. 92, p460-475.

Flood frequency

New Look at Regional Flood-Frequency Relations for Arid Lands, Hjalmar W. Hjalmarson and Blakemore E. Thomas, HY June 92, p868-886.

Physically Based Flood Features and Frequencies, Hsieh Wen Shen, Gregory John Koch and Jayantha T. B. Obeysekera, HY Apr. 90, p494-514.

Flood plains

Preferred Directions of Flow on Alluvial Fans, Richard H. French, HY July 92, p1002-1013.

Flood routing

Numerical Solution of Muskingum Equation, Mohammad Akram Gill, HY May 92, p804-809.

Floods

1-D Open-Channel Flow Simulation Using TVD-McCormack Scheme, P. García-Navarro, F. Alcrudo and J. M. Savirón, HY Oct. 92, p1359-1372.

Confidence Interval for Design Floods with Estimated Skew Coefficient, Jahir Uddin Chowdhury and Jery R. Stedinger, HY July 91, p811-831.

Evaluation of Supercritical/Subcritical Flows in High-Gradient Channel, Douglas J. Trieste, HY Aug. 92, p1107-1118.

New Look at Regional Flood-Frequency Relations for Arid Lands, Hjalmar W. Hjalmarson and Blakemore E. Thomas, HY June 92, p868-886.

Physically Based Flood Features and Frequencies, Hsieh Wen Shen, Gregory John Koch and Jayantha T. B. Obeysekera, HY Apr. 90, p494-514.

Separation of Skewness: Reality or Regional Artifact? Fahim Ashkar, Bernard Bobée and Jacques Bernier, HY Mar. 92, p460-475.

Flow

Flow and Energy Dissipation Over Stepped Gabion Weirs, L. Peyras, P. Royet and G. Degoutte, HY May 92, p707-717.

Vibration of Beams and Trashracks in Parallel and Inclined Flows, Thang D. Nguyen and Eduard Naudascher, HY Aug. 91, p1056-1076.

Flow measurement

Small Parshall Flume Rating Correction, Steven R. Abt, Christopher Cook, Kenneth J. Staker and Derek D. Johns, HY May 92, p798-803.

Flow patterns

Routing Debris Flows with Particle Segregation, Tamotsu Takahashi, Hajime Nakagawa, Tatsuo Harada and Yousuke Yamashiki, HY Nov. 92, p1490-1507.

Stepwise Disaggregation Scheme for Synthetic Hydrology, Emidio G. Santos and Jose D. Salas, HY May 92, p765-784.

Flow rates

Small Parshall Flume Rating Correction, Steven R. Abt, Christopher Cook, Kenneth J. Staker and Derek D. Johns, HY May 92, p798-803.

Flow resistance

Boundary Shear Stress and Roughness Over Mobile Alluvial Beds, Peter J. Whiting and William E. Dietrich, HY Dec. 90, p1495-1511.

Dimensionally Homogeneous Manning's Formula, Ben Chie Yen, HY Sept. 92, p1326-1332.

Flow Resistance of Riprap, Stephen T. Maynord, HY June 91, p687-696.

Mechanics of Saltating Grains. II, Masato Sekine and Hideo Kikkawa, HY Apr. 92, p536-558.

Predicting Influence of Bank Vegetation on Channel Capacity, Richard Masterman and Colin R. Thorne, HY July 92, p1052-1058.

Resistance in Flat-Bed Sediment-Laden Flows, D. A. Lyn, HY Jan. 91, p94-114.

Stochastic Theory for Irregular Stream Modeling. Part I: Flow Resistance, Shu-Guang Li, Lakshmi Venkataraman and Dennis McLaughlin, HY Aug. 92, p1079-1090.

Fluid flow

Solving Turbulent Flows Using Finite Elements, John I. Finnie and Roland W. Jeppson, HY Nov. 91, p1513-1530.

Source Control of Intrusions Along Horizontal Boundary, J. Bühler, S. J. Wright and Y. Kim, HY Mar. 92, p442-459.

Flumes

Measurement and Prediction of Surface Shear Stress in Annular Flume, D. I. Graham, P. W. James, T. E. R. Jones, J. M. Davies and E. A. Delo, HY Sept. 92, p1270-1286.

Small Parshall Flume Rating Correction, Steven R. Abt, Christopher Cook, Kenneth J. Staker and Derek D. Johns, HY May 92, p798-803.

Fluvial hydraulics

First Step Away from Lacey's Regime Equations, Michael A. Stevens and Carl F. Nordin, Jr., HY Nov. 90, p1422-1425.

River Bed Degradation Due to Abrupt Outfall Lowering, C. W. Lenau and A. T. Hjelmfelt, Jr., HY June 92, p918-933.

Footings

Effects of Footing Location on Bridge Pier Scour, J. Sterling Jones, Roger T. Kilgore and Mark P. Mistichelli, HY Feb. 92, p280-290.

Force

Force on Slab Beneath Hydraulic Jump, Javad Farhoudi and Rangaswami Narayanan, HY Jan. 91, p64-82.

Free surfaces

Momentum and Energy Coefficients Based on Power-Law Velocity Profile, Cheng-lung Chen, HY Nov. 92, p1571-1584.

Friction

Effects of Porous Bed on Turbulent Stream Flow above Bed, Cesar Mendoza and Donghuo Zhou, HY Sept. 92, p1222-1240.

Motion of Contact-Load Particles at High Shear Stress, Fidelia N. Nnadi and Kenneth C. Wilson, HY Dec. 92, p1670-1684.

Friction coefficient, hydraulic

Skimming Flow in Stepped Spillways, N. Rajaratnam, HY Apr. 90, p587-591.

Friction factor

Dimensionally Homogeneous Manning's Formula, Ben Chie Yen, HY Sept. 92, p1326-1332.

Resistance in Flat-Bed Sediment-Laden Flows, D. A. Lyn, HY Jan. 91, p94-114.

Friction resistance

Frictional Resistance of Overland Flow on Tropical Turfed Slope, Yee-Meng Chiew and Soon-Keat Tan, HY Jan. 92, p92-97.

Froude number

Dividing Flow in Open Channels, Amruthur S. Ramamurthy, Duc Minh Tran and Luis B. Carballada, HY Mar. 90, p449-455.

Momentum and Energy Coefficients Based on Power-Law Velocity Profile, Cheng-lung Chen, HY Nov. 92, p1571-1584.

Fuzzy sets

Design-Basis Flood for Rehabilitation of Existing Dams, Anand Prakash, HY Feb. 92, p291-305.

Gabions

Flow and Energy Dissipation Over Stepped Gabion Weirs, L. Peyras, P. Royet and G. Degoutte, HY May 92, p707-717.

Grade control structures

Analysis of ARS Low-Drop Grade-Control Structure, Steven R. Abt, Mark R. Peterson, Chester C. Watson and Scott A. Hogan, HY Oct. 92, p1424-1434.

Scour Downstream of Grade-Control Structures, Noel E. Bormann and Pierre Y. Julien, HY May 91, p579-594.

Grain size

Incipient Motion during Static Armoring, Anders Wörman, HY Mar. 92, p496-501.

Routing of Heterogeneous Sediments over Movable Bed: Model Development, Andre van Niekerk, Koen R. Vogel, Rudy L. Slingerland and John S. Bridge, HY Feb. 92, p246-262.

Routing of Heterogeneous Sediments over Movable Bed: Model Verification, Koen R. Vogel, Andre van Niekerk, Rudy L. Slingerland and John S. Bridge, HY Feb. 92, p263-279.

Granular materials

Boundary Shear Stress and Roughness Over Mobile Alluvial Beds, Peter J. Whiting and William E. Dietrich, HY Dec. 90, p1495-1511.

Graph theory

State-Space Analysis and Control of Slow Transients in Pipes, Masashi Shimada, HY Sept. 92, p1287-1304.

Grasses

Frictional Resistance of Overland Flow on Tropical Turfed Slope, Yee-Meng Chiew and Soon-Keat Tan, HY Jan. 92, p92-97.

Gravel

Mean Size Distribution of Bed Load on Goodwin Creek, Roger A. Kuhnle and Joe C. Willis, HY Oct. 92, p1443-1446.

Gravity

Bed-Load Transport on Transverse Slope. I, Masato Sekine and Gary Parker, HY Apr. 92, p513-535.

Ground water

Review of Geostatistics in Geohydrology: I. Basic Concepts, ASCE Task Committee on Geostatistical Techniques in Geohydrology of the Ground Water Hydrology Committee of the ASCE Hydraulics Division, HY May 90, p612-632.

Review of Ground-Water Quality Monitoring Network Design, Hugo A. Loaiciga, Randall J. Charbeneau, Lorne G. Everett, Graham E. Fogg, Benjamin F. Hobbs and Shahrokh Rouhani, HY Jan. 92, p11-37.

Ground-water flow

Comparative Survey of Four Unsaturated Soil Flow Equations, Abbas A. Fiuzat and David W. Moughton, HY May 92, p786-791.

The Hopscotch Algorithm for Three-Dimensional Simulation, Geneviève Ségol, HY Mar. 92, p385-406.

Ground-water quality

Review of Ground-Water Quality Monitoring Network Design, Hugo A. Loaiciga, Randall J. Charbeneau, Lorne G. Everett, Graham E. Fogg, Benjamin F. Hobbs and Shahrokh Rouhani, HY Jan. 92, p11-37.

Gulf of Mexico

Tide and Storm Surge Predictions Using Finite Element Model, J. J. Westerink, R. A. Luettich, A. M. Baptista, N. W. Scheffner and P. Farrar, HY Oct. 92, p1373-1390.

Head loss

Head Losses in Storm Sewer Manholes: Submerged Jet Theory, Flemming Bo Pedersen and Ole Mark, HY Nov. 90, p1317-1328.

Highways

Discharge Capacity for Curb-Opening Inlets, Ali Uyumaz, HY July 92, p1048-1051.

Hydraulic conductivity

Type Curves for a Slug Test in an Infinitely or Semi-infinitely Thick Aquifer, Gary R. Chirlin, (*Symposium on Ground Water*, Gerard P. Lennon, ed. and Shakrokh Rouhani, ed., 1991), p169-174.

Hydraulic engineering

Influence of Liquid Length Variation in Hydraulic Transients, Enrique Cabrera, José Abreu, Rafael Pérez and Antonio Vela, HY Dec. 92, p1639-1650.

Hydraulic gradients

Conversion Between Quadratic and Power Law for Non-Darcy Flow, G. H. George and D. Hansen, HY May 92, p792-797.

HGL Elevation at Pipe Exit of USBR Type VI Impact Basin, Charles E. Rice and Kem C. Kadavy, HY July 91, p929-933.

Hydraulic jump

1-D Open-Channel Flow Simulation Using TVD-McCormack Scheme, P. García-Navarro, F. Alcrudo and J. M. Savirón, HY Oct. 92, p1359-1372.

Drownproofing of Low Overflow Structures, Hans J. Leutheusser and Warren M. Birk, HY Feb. 91, p205-213.

Force on Slab Beneath Hydraulic Jump, Javad Farhoudi and Rangaswami Narayanan, HY Jan. 91, p64-82.

Source Control of Intrusions Along Horizontal Boundary, J. Bühler, S. J. Wright and Y. Kim, HY Mar. 92, p442-459.

Hydraulic models

Proposed Similarity Law for Surface Velocity in Hydraulic Models, Dajin Yu and Weijun Zhao, HY Sept. 92, p1318-1325.

Hydraulic roughness

Boundary Shear Stress and Roughness Over Mobile Alluvial Beds, Peter J. Whiting and William E. Dietrich, HY Dec. 90, p1495-1511.

Dimensionally Homogeneous Manning's Formula, Ben Chie Yen, HY Sept. 92, p1326-1332.

Hydraulic structures

Analysis of ARS Low-Drop Grade-Control Structure, Steven R. Abt, Mark R. Peterson, Chester C. Watson and Scott A. Hogan, HY Oct. 92, p1424-1434.

Scour Downstream of Grade-Control Structures, Noel E. Bormann and Pierre Y. Julien, HY May 91, p579-594.

Hydraulic transients

Influence of Liquid Length Variation in Hydraulic Transients, Enrique Cabrera, José Abreu, Rafael Pérez and Antonio Vela, HY Dec. 92, p1639-1650.

Hydraulics

Analysis of Spiral Vortex and Vertical Slot Vortex Drop Shafts, Michael C. Quick, HY Mar. 90, p309-325.

Calculation of Total Conveyance in Natural Channels, J. Garbrecht and G. O. Brown, HY June 91, p788-798.

Conceptual Bed-Load Transport Model and Verification for Sediment Mixtures, Shaohua Marko Hsu and Forrest M. Holly, Jr., HY Aug. 92, p1135-1152.

Evaluation of Supercritical/Subcritical Flows in High-Gradient Channel, Douglas J. Trieste, HY Aug. 92, p1107-1118.

Flow Field Induced by Sea Waves Over Brick-Pattern Ripples, G. Vittori, HY Sept. 92, p1241-1259.

Future Trends and Needs in Hydraulics, Daryl B. Simons, HY Dec. 92, p1607-1620.

Optimization-Availability-Based Design of Water-Distribution Networks, M. John Cullinane, Kevin E. Lansey and Larry W. Mays, HY Mar. 92, p420-441.

Uniform Aerated Chute Flow, Willi H. Hager, HY Apr. 91, p528-533.

Wave-Motion Stability in Canals with Automatic Controllers, Simion Hancu and Paul Dan, HY Dec. 92, p1621-1638.

Hydrodynamics

Modeling Vertical Structure of Open-Channel Flows, Alan F. Blumberg, Boris Galperin and Donald J. O'Connor, HY Aug. 92, p1119-1134.

Hydroelectric powerplants

Nonlinear Stability of Differential Surge Chambers, Xiao-Liang Yang and Chen-Shan Kung, HY Nov. 92, p1526-1539.

Hydrogeology

Review of Ground-Water Quality Monitoring Network Design, Hugo A. Loaiciga, Randall J. Charbeneau, Lorne G. Everett, Graham E. Fogg, Benjamin F. Hobbs and Shahrokh Rouhani, HY Jan. 92, p11-37.

Hydrographs
Numerical Solution of Muskingum Equation, Mohammad Akram Gill, HY May 92, p804-809.
Physically Based Flood Features and Frequencies, Hsieh Wen Shen, Gregory John Koch and Jayantha T. B. Obeysekera, HY Apr. 90, p494-514.

Hydrologic aspects
Design-Basis Flood for Rehabilitation of Existing Dams, Anand Prakash, HY Feb. 92, p291-305.

Hydrology
Adaptive Parameter Estimation for Multisite Hydrologic Forecasting, Haitham M. Awwad and Juan B. Valdés, HY Sept. 92, p1201-1221.
Conceptual Basis of Seasonal Streamflow Time Series Models, Jose D. Salas and J. T. B. Obeysekera, HY Aug. 92, p1186-1194.
Investigation of Curve Number Procedure, Allen T. Hjelmfelt, Jr., HY June 91, p725-737.
New Look at Regional Flood-Frequency Relations for Arid Lands, Hjalmar W. Hjalmarson and Blakemore E. Thomas, HY June 92, p868-886.
Short-Duration Rainfalls in Sicily, Giovanni B. Ferreri and Vito Ferro, HY Mar. 90, p430-435.

Hydrostatic pressure
Optimum Location of Drains in Concrete Dams, A. S. Chawla, R. K. Thakur and Akhilesh Kumar, HY July 90, p930-943.

In situ tests
Type Curves for a Slug Test in an Infinitely or Semi-infinitely Thick Aquifer, Gary R. Chirlin, (*Symposium on Ground Water*, Gerard P. Lennon, ed. and Shakrokh Rouhani, ed., 1991), p169-174.

Incipient motion
Incipient Motion during Static Armoring, Anders Wörman, HY Mar. 92, p496-501.

India
Rainfall Intensity-Duration-Frequency Formula for India, Umesh C. Kothyari and Ramchandra J. Garde, HY Feb. 92, p323-336.

Infiltration rate
Investigation of Curve Number Procedure, Allen T. Hjelmfelt, Jr., HY June 91, p725-737.

Inflow
Density Currents Entering Lakes and Reservoirs, Vahid Alavian, Gerhard H. Jirka, Richard A. Denton, Marc C. Johnson and Heinz G. Stefan, HY Nov. 92, p1464-1489.
Numerical Solution of Muskingum Equation, Mohammad Akram Gill, HY May 92, p804-809.

Infrastructure
Future Trends and Needs in Hydraulics, Daryl B. Simons, HY Dec. 92, p1607-1620.

Interfaces
Source Control of Intrusions Along Horizontal Boundary, J. Bühler, S. J. Wright and Y. Kim, HY Mar. 92, p442-459.

Internal pressure
Optimum Location of Drains in Concrete Dams, A. S. Chawla, R. K. Thakur and Akhilesh Kumar, HY July 90, p930-943.

Interpolation
Spline Interpolations for Water Hammer Analysis, I. A. Sibetheros, E. R. Holley and J. M. Branski, HY Oct. 91, p1332-1351.

Intrusion
Source Control of Intrusions Along Horizontal Boundary, J. Bühler, S. J. Wright and Y. Kim, HY Mar. 92, p442-459.

Iteration
The Hopscotch Algorithm for Three-Dimensional Simulation, Geneviève Ségol, HY Mar. 92, p385-406.

Jet diffusion
Scour Downstream of Grade-Control Structures, Noel E. Bormann and Pierre Y. Julien, HY May 91, p579-594.

Jets
Head Losses in Storm Sewer Manholes: Submerged Jet Theory, Flemming Bo Pedersen and Ole Mark, HY Nov. 90, p1317-1328.

Kalman filter
Adaptive Parameter Estimation for Multisite Hydrologic Forecasting, Haitham M. Awwad and Juan B. Valdés, HY Sept. 92, p1201-1221.

Kinematic wave theory
Kinematic Wave Controversy, Victor M. Ponce, HY Apr. 91, p511-525.

Laboratory tests
Effect of Spoilers on Scour at Submarine Pipelines, Yee-Meng Chiew, HY Sept. 92, p1311-1317.
Effects of Footing Location on Bridge Pier Scour, J. Sterling Jones, Roger T. Kilgore and Mark P. Mistichelli, HY Feb. 92, p280-290.
Laboratory Investigation of Beach Profiles in Tailings Disposal, Xiaosheng Fan and Jacob Masliyah, HY Nov. 90, p1357-1373.
Local Scour at Bridge Abutments, B. W. Melville, HY Apr. 92, p615-631.
Resistance in Flat-Bed Sediment-Laden Flows, D. A. Lyn, HY Jan. 91, p94-114.
Sediment Management with Submerged Vanes. II: Applications, A. Jacob Odgaard and Yalin Wang, HY Mar. 91, p284-302.
Study of Time-Dependent Local Scour Around Bridge Piers, A. Melih Yanmaz and H. Doğan Altınbilek, HY Oct. 91, p1247-1268.

Lagrangian functions
Lagrangian Solution of St. Venant's Equations for Alluvial Estuary, Hubert H. G. Savenije, HY Aug. 92, p1153-1163.

Lakes
Density Currents Entering Lakes and Reservoirs, Vahid Alavian, Gerhard H. Jirka, Richard A. Denton, Marc C. Johnson and Heinz G. Stefan, HY Nov. 92, p1464-1489.

Thermal Stratification Modeling of Lakes with Sediment Heat Flux, Ting-Kuei Tsay, Gordon J. Ruggaber, Steven W. Effler and Charles T. Driscoll, HY Mar. 92, p407-419.

Landfills

Two-Dimensional Leachate Estimation through Landfills, Shabbir Ahmed, Reza M. Khanbilvardi, John Fillos and Phillip J. Gleason, HY Feb. 92, p306-322.

Laplace transform

River Bed Degradation Due to Abrupt Outfall Lowering, C. W. Lenau and A. T. Hjelmfelt, Jr., HY June 92, p918-933.

Leachates

Two-Dimensional Leachate Estimation through Landfills, Shabbir Ahmed, Reza M. Khanbilvardi, John Fillos and Phillip J. Gleason, HY Feb. 92, p306-322.

Leakage

Leaks in Pipe Networks, Ranko S. Pudar and James A. Liggett, HY July 92, p1031-1046.

Length

Velocity Distribution in Uniform Sediment-Laden Flow, Motohiko Umeyama and Franciscus Gerritsen, HY Feb. 92, p229-245.

Linings

Fluctuating Uplift and Lining Design in Spillway Stilling Basins, Virgilio Fiorotto and Andrea Rinaldo, HY Apr. 92, p578-596.

Loads

Vibration of Beams and Trashracks in Parallel and Inclined Flows, Thang D. Nguyen and Eduard Naudascher, HY Aug. 91, p1056-1076.

Location

Effects of Footing Location on Bridge Pier Scour, J. Sterling Jones, Roger T. Kilgore and Mark P. Mistichelli, HY Feb. 92, p280-290.

Optimum Location of Drains in Concrete Dams, A. S. Chawla, R. K. Thakur and Akhilesh Kumar, HY July 90, p930-943.

Low flow

Modeling Low-Flow Mixing through Pools and Riffles, Il Won Seo and W. Hall C. Maxwell, HY Oct. 92, p1406-1423.

Manholes

Head Losses in Storm Sewer Manholes: Submerged Jet Theory, Flemming Bo Pedersen and Ole Mark, HY Nov. 90, p1317-1328.

Mapping

Review of Geostatistics in Geohydrology: I. Basic Concepts, ASCE Task Committee on Geostatistical Techniques in Geohydrology of the Ground Water Hydrology Committee of the ASCE Hydraulics Division, HY May 90, p612-632.

Mass transport

The Hopscotch Algorithm for Three-Dimensional Simulation, Geneviève Ségol, HY Mar. 92, p385-406.

Mathematical models

1-D Open-Channel Flow Simulation Using TVD-McCormack Scheme, P. García-Navarro, F. Alcrudo and J. M. Savirón, HY Oct. 92, p1359-1372.

Conceptual Bed-Load Transport Model and Verification for Sediment Mixtures, Shaohua Marko Hsu and Forrest M. Holly, Jr., HY Aug. 92, p1135-1152.

Modeling Channel Bed Transients Using Explicit F-D Schemes, B. Morse and R. D. Townsend, HY Nov. 90, p1345-1356.

Modeling Low-Flow Mixing through Pools and Riffles, Il Won Seo and W. Hall C. Maxwell, HY Oct. 92, p1406-1423.

Modeling Vertical Structure of Open-Channel Flows, Alan F. Blumberg, Boris Galperin and Donald J. O'Connor, HY Aug. 92, p1119-1134.

Use of Density Current to Modify Thermal Structure of TVA Reservoirs, Vahid Alavian and Pete Ostrowski, Jr., HY May 92, p688-706.

Mathematics

Conversion Between Quadratic and Power Law for Non-Darcy Flow, G. H. George and D. Hansen, HY May 92, p792-797.

EQSWP: Extended Unsteady-Flow Double-Sweep Equation Solver, Theodor Strelkoff, HY May 92, p735-742.

Matrices, mathematics

EQSWP: Extended Unsteady-Flow Double-Sweep Equation Solver, Theodor Strelkoff, HY May 92, p735-742.

Measurement

Measurement and Prediction of Surface Shear Stress in Annular Flume, D. I. Graham, P. W. James, T. E. R. Jones, J. M. Davies and E. A. Delo, HY Sept. 92, p1270-1286.

Measuring instruments

New Total Sediment-Load Sampler, Leo C. van Rijn and Moustafa T. K. Gaweesh, HY Dec. 92, p1686-1691.

Mining

Laboratory Investigation of Beach Profiles in Tailings Disposal, Xiaosheng Fan and Jacob Masliyah, HY Nov. 90, p1357-1373.

Mixing

Destruction of Stratification By Bubble Plume, W. D. Baines and A. M. Leitch, HY Apr. 92, p559-577.

Longitudinal Dispersion Coefficients in Estuary, I. Guymer and J. R. West, HY May 92, p718-734.

Modeling Low-Flow Mixing through Pools and Riffles, Il Won Seo and W. Hall C. Maxwell, HY Oct. 92, p1406-1423.

Velocity Distribution in Uniform Sediment-Laden Flow, Motohiko Umeyama and Franciscus Gerritsen, HY Feb. 92, p229-245.

Mobility

Conceptual Bed-Load Transport Model and Verification for Sediment Mixtures, Shaohua Marko Hsu and Forrest M. Holly, Jr., HY Aug. 92, p1135-1152.

Model tests

HGL Elevation at Pipe Exit of USBR Type VI Impact Basin, Charles E. Rice and Kem C. Kadavy, HY July 91, p929-933.

Model verification

Modeling Vertical Structure of Open-Channel Flows, Alan F. Blumberg, Boris Galperin and Donald J. O'Connor, HY Aug. 92, p1119-1134.

Routing of Heterogeneous Sediments over Movable Bed: Model Verification, Koen R. Vogel, Andre van Niekerk, Rudy L. Slingerland and John S. Bridge, HY Feb. 92, p263-279.

Modeling

Adaptive Parameter Estimation for Multisite Hydrologic Forecasting, Haitham M. Awwad and Juan B. Valdés, HY Sept. 92, p1201-1221.

Aggradation-Degradation Process in Alluvial Channels, Chin-lien Yen, Shou-young Chang and Hong-Yuan Lee, HY Dec. 92, p1651-1669.

Evaluation of Supercritical/Subcritical Flows in High-Gradient Channel, Douglas J. Trieste, HY Aug. 92, p1107-1118.

Routing of Heterogeneous Sediments over Movable Bed: Model Development, Andre van Niekerk, Koen R. Vogel, Rudy L. Slingerland and John S. Bridge, HY Feb. 92, p246-262.

Stepwise Disaggregation Scheme for Synthetic Hydrology, Emidio G. Santos and Jose D. Salas, HY May 92, p765-784.

Vertical Sediment Distribution, Jin Ren Ni and Guang Qian Wang, HY Sept. 91, p1184-1194.

Models

Fully Coupled Unsteady Mobile Boundary Flow Model (FCM), Luís R.P. Correia, Bommanna G. Krishnappan and Walter H. Graf, HY Mar. 92, p476-494.

Hydraulic Geometry of Threshold Channels, Panayiotis Diplas and Gregorio Vigilar, HY Apr. 92, p597-614.

Study of Time-Dependent Local Scour Around Bridge Piers, A. Melih Yanmaz and H. Doğan Altınbilek, HY Oct. 91, p1247-1268.

Thermal Stratification Modeling of Lakes with Sediment Heat Flux, Ting-Kuei Tsay, Gordon J. Ruggaber, Steven W. Effler and Charles T. Driscoll, HY Mar. 92, p407-419.

Trash Rack Blockage in Supercritical Flow, Steven R. Abt, Thomas E. Brisbane, David M. Frick and Charles A. McKnight, HY Dec. 92, p1692-1696.

Monitoring

Review of Ground-Water Quality Monitoring Network Design, Hugo A. Loaiciga, Randall J. Charbeneau, Lorne G. Everett, Graham E. Fogg, Benjamin F. Hobbs and Shahrokh Rouhani, HY Jan. 92, p11-37.

Movable bed models

Note on Lag in Bedload Discharge, Subhash C. Jain, HY June 92, p904-917.

Navier-Stokes equations

Solving Turbulent Flows Using Finite Elements, John I. Finnie and Roland W. Jeppson, HY Nov. 91, p1513-1530.

Network design

Review of Ground-Water Quality Monitoring Network Design, Hugo A. Loaiciga, Randall J. Charbeneau, Lorne G. Everett, Graham E. Fogg, Benjamin F. Hobbs and Shahrokh Rouhani, HY Jan. 92, p11-37.

Network reliability

Entropy-Based Redundancy Measures in Water-Distribution Networks, Kofi Awumah, Ian Goulter and Suresh K. Bhatt, HY May 91, p595-614.

Networks

Entropy-Based Redundancy Measures in Water-Distribution Networks, Kofi Awumah, Ian Goulter and Suresh K. Bhatt, HY May 91, p595-614.

Nonlinear analysis

Nonlinear Stability of Differential Surge Chambers, Xiao-Liang Yang and Chen-Shan Kung, HY Nov. 92, p1526-1539.

Nonuniform flow

Variation of Velocity Distribution along Nonuniform Open-Channel Flow, Chao-Lin Chiu and David W. Murray, HY July 92, p989-1001.

Nuclear power plants

Use of Density Current to Modify Thermal Structure of TVA Reservoirs, Vahid Alavian and Pete Ostrowski, Jr., HY May 92, p688-706.

Numerical analysis

Development of Bed Features, Arved J. Raudkivi and Hans-H. Witte, HY Sept. 90, p1063-1079.

Measurement and Prediction of Surface Shear Stress in Annular Flume, D. I. Graham, P. W. James, T. E. R. Jones, J. M. Davies and E. A. Delo, HY Sept. 92, p1270-1286.

Prediction Method for Local Scour by Warmed Cooling-Water Jets, S. Ushijima, T. Shimizu, A. Sasaki and Y. Takizawa, HY Aug. 92, p1164-1183.

Solving Turbulent Flows Using Finite Elements, John I. Finnie and Roland W. Jeppson, HY Nov. 91, p1513-1530.

Spline Interpolations for Water Hammer Analysis, I. A. Sibetheros, E. R. Holley and J. M. Branski, HY Oct. 91, p1332-1351.

Numerical calculations

Kinematic Wave Controversy, Victor M. Ponce, HY Apr. 91, p511-525.

Numerical Solution of Muskingum Equation, Mohammad Akram Gill, HY May 92, p804-809.

Numerical models

Bed-Load Transport on Transverse Slope. I, Masato Sekine and Gary Parker, HY Apr. 92, p513-535.

Density Currents and Shear-Induced Flocculation in Sedimentation Tanks, D. A. Lyn, A. I. Stamou and W. Rodi, HY June 92, p849-867.

The Hopscotch Algorithm for Three-Dimensional Simulation, Geneviève Ségol, HY Mar. 92, p385-406.

Mechanics of Saltating Grains. II, Masato Sekine and Hideo Kikkawa, HY Apr. 92, p536-558.

Modeling of Rectangular Settling Tanks, Siping Zhou and John A. McCorquodale, HY Oct. 92, p1391-1405.

Routing of Heterogeneous Sediments over Movable Bed: Model Development, Andre van Niekerk, Koen R. Vogel, Rudy L. Slingerland and John S. Bridge, HY Feb. 92, p246-262.

Two-Dimensional Leachate Estimation through Landfills, Shabbir Ahmed, Reza M. Khanbilvardi, John Fillos and Phillip J. Gleason, HY Feb. 92, p306-322.

Ocean disposal

Mixing, Dispersion, and Resuspension in Vicinity of Ocean Wastewater Plume, Libe Washburn, Burton H. Jones, Alan Bratkovich, T. D. Dickey and Ming-Sue Chen, HY Jan. 92, p38-58.

Ocean engineering

Diffusion and Dispersion in Coastal Waters, E. John List, Gregory Gartrell and Clinton D. Winant, HY Oct. 90, p1158-1179.

Ocean waves

Flow Field Induced by Sea Waves Over Brick-Pattern Ripples, G. Vittori, HY Sept. 92, p1241-1259.

Open channel flow

1-D Open-Channel Flow Simulation Using TVD-McCormack Scheme, P. García-Navarro, F. Alcrudo and J. M. Savirón, HY Oct. 92, p1359-1372.

Characteristic Dissipative Galerkin Scheme for Open-Channel Flow, F. E. Hicks and P. M. Steffler, HY Feb. 92, p337-352.

Dividing Flow in Open Channels, Amruthur S. Ramamurthy, Duc Minh Tran and Luis B. Carballada, HY Mar. 90, p449-455.

Menu of Coupled Velocity and Sediment-Discharge Relations for Rivers, M. Fazle Karim and John F. Kennedy, HY Aug. 90, p978-996.

Modeling Vertical Structure of Open-Channel Flows, Alan F. Blumberg, Boris Galperin and Donald J. O'Connor, HY Aug. 92, p1119-1134.

Resistance in Flat-Bed Sediment-Laden Flows, D. A. Lyn, HY Jan. 91, p94-114.

Stochastic Theory for Irregular Stream Modeling. Part I: Flow Resistance, Shu-Guang Li, Lakshmi Venkataraman and Dennis McLaughlin, HY Aug. 92, p1079-1090.

Suspended Sediment-Transport Capacity for Open Channel Flow, Ismail Celik and Wolfgang Rodi, HY Feb. 91, p191-204.

Turbulence Characteristics of Sediment-Laden Flows in Open Channels, D. A. Lyn, HY July 92, p971-988.

Variation of Velocity Distribution along Nonuniform Open-Channel Flow, Chao-Lin Chiu and David W. Murray, HY July 92, p989-1001.

Velocity Profiles in Steep Open-Channel Flows, Akihiro Tominaga and Iehisa Nezu, HY Jan. 92, p73-90.

Open channels

Dimensionally Homogeneous Manning's Formula, Ben Chie Yen, HY Sept. 92, p1326-1332.

Effects of Porous Bed on Turbulent Stream Flow above Bed, Cesar Mendoza and Donghuo Zhou, HY Sept. 92, p1222-1240.

EQSWP: Extended Unsteady-Flow Double-Sweep Equation Solver, Theodor Strelkoff, HY May 92, p735-742.

Modeling Low-Flow Mixing through Pools and Riffles, Il Won Seo and W. Hall C. Maxwell, HY Oct. 92, p1406-1423.

Small Parshall Flume Rating Correction, Steven R. Abt, Christopher Cook, Kenneth J. Staker and Derek D. Johns, HY May 92, p798-803.

Study of Open-Channel Dynamics as Controlled Process, Yuri A. Ermolin, HY Jan. 92, p59-72.

Variation of Velocity Distribution along Nonuniform Open-Channel Flow, Chao-Lin Chiu and David W. Murray, HY July 92, p989-1001.

Vertical Distribution of Suspended Sediment in Uniform Open-Channel Flow, Motohiko Umeyama, HY June 92, p936-941.

Optimal design

Explicit Calculation of Pipe-Network Parameters, Paul F. Boulos and Don J. Wood, HY Nov. 90, p1329-1344.

Optimum Location of Drains in Concrete Dams, A. S. Chawla, R. K. Thakur and Akhilesh Kumar, HY July 90, p930-943.

Optimization

Optimization-Availability-Based Design of Water-Distribution Networks, M. John Cullinane, Kevin E. Lansey and Larry W. Mays, HY Mar. 92, p420-441.

Review of Ground-Water Quality Monitoring Network Design, Hugo A. Loaiciga, Randall J. Charbeneau, Lorne G. Everett, Graham E. Fogg, Benjamin F. Hobbs and Shahrokh Rouhani, HY Jan. 92, p11-37.

Oscillations

Nonlinear Stability of Differential Surge Chambers, Xiao-Liang Yang and Chen-Shan Kung, HY Nov. 92, p1526-1539.

Oscillatory flow

Flow Field Induced by Sea Waves Over Brick-Pattern Ripples, G. Vittori, HY Sept. 92, p1241-1259.

Outfall sewers

Mixing, Dispersion, and Resuspension in Vicinity of Ocean Wastewater Plume, Libe Washburn, Burton H. Jones, Alan Bratkovich, T. D. Dickey and Ming-Sue Chen, HY Jan. 92, p38-58.

Outflows

Numerical Solution of Muskingum Equation, Mohammad Akram Gill, HY May 92, p804-809.

Overland flow

Frictional Resistance of Overland Flow on Tropical Turfed Slope, Yee-Meng Chiew and Soon-Keat Tan, HY Jan. 92, p92-97.

Kinematic Wave Controversy, Victor M. Ponce, HY Apr. 91, p511-525.

Parameters

Calibration Strategy for Urban Catchment Parameters, Yaacob Ibrahim and Shie-Yui Liong, HY Nov. 92, p1550-1570.

Explicit Calculation of Pipe-Network Parameters, Paul F. Boulos and Don J. Wood, HY Nov. 90, p1329-1344.

Particle distribution

Routing Debris Flows with Particle Segregation, Tamotsu Takahashi, Hajime Nakagawa, Tatsuo Harada and Yousuke Yamashiki, HY Nov. 92, p1490-1507.

Particles

Bed-Load Transport on Transverse Slope. I, Masato Sekine and Gary Parker, HY Apr. 92, p513-535.

Drag Coefficient and Fall Velocity of Nonspherical Particles, Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY May 91, p660-667.

Mechanics of Saltating Grains. II, Masato Sekine and Hideo Kikkawa, HY Apr. 92, p536-558.

Motion of Contact-Load Particles at High Shear Stress, Fidelia N. Nnadi and Kenneth C. Wilson, HY Dec. 92, p1670-1684.

Performance evaluation

Analysis of ARS Low-Drop Grade-Control Structure, Steven R. Abt, Mark R. Peterson, Chester C. Watson and Scott A. Hogan, HY Oct. 92, p1424-1434.

Permeability

Effects of Porous Bed on Turbulent Stream Flow above Bed, Cesar Mendoza and Donghuo Zhou, HY Sept. 92, p1222-1240.

Piers

Assessing Time-Variant Bridge Reliability Due to Pier Scour, Peggy A. Johnson and Bilal M. Ayyub, HY June 92, p887-903.

Effects of Footing Location on Bridge Pier Scour, J. Sterling Jones, Roger T. Kilgore and Mark P. Mistichelli, HY Feb. 92, p280-290.

Temporal Variation of Scour Around Circular Bridge Piers, Umesh C. Kothyari, Ramchandra J. Garde and Kittur G. Ranga Raju, HY Aug. 92, p1091-1106.

Pipe design

Explicit Calculation of Pipe-Network Parameters, Paul F. Boulos and Don J. Wood, HY Nov. 90, p1329-1344.

Pipe flow

Dimensionally Homogeneous Manning's Formula, Ben Chie Yen, HY Sept. 92, p1326-1332.

Pipe networks

Efficient Calculation of Transient Flow in Simple Pipe Networks, Bryan W. Karney and Duncan McInnis, HY July 92, p1014-1030.

Explicit Calculation of Pipe-Network Parameters, Paul F. Boulos and Don J. Wood, HY Nov. 90, p1329-1344.

Leaks in Pipe Networks, Ranko S. Pudar and James A. Liggett, HY July 92, p1031-1046.

Pipelines

Efficient Calculation of Transient Flow in Simple Pipe Networks, Bryan W. Karney and Duncan McInnis, HY July 92, p1014-1030.

Influence of Liquid Length Variation in Hydraulic Transients, Enrique Cabrera, José Abreu, Rafael Pérez and Antonio Vela, HY Dec. 92, p1639-1650.

State-Space Analysis and Control of Slow Transients in Pipes, Masashi Shimada, HY Sept. 92, p1287-1304.

Pipes

Leaks in Pipe Networks, Ranko S. Pudar and James A. Liggett, HY July 92, p1031-1046.

Plumes

Destruction of Stratification By Bubble Plume, W. D. Baines and A. M. Leitch, HY Apr. 92, p559-577.

Mixing, Dispersion, and Resuspension in Vicinity of Ocean Wastewater Plume, Libe Washburn, Burton H. Jones, Alan Bratkovich, T. D. Dickey and Ming-Sue Chen, HY Jan. 92, p38-58.

Plunging flow

Density Currents Entering Lakes and Reservoirs, Vahid Alavian, Gerhard H. Jirka, Richard A. Denton, Marc C. Johnson and Heinz G. Stefan, HY Nov. 92, p1464-1489.

Pipe Plunge Pool Energy Dissipator, Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323.

Use of Density Current to Modify Thermal Structure of TVA Reservoirs, Vahid Alavian and Pete Ostrowski, Jr., HY May 92, p688-706.

Pollutants

Application of Three-Dimensional Lagrangian Residual Transport, Mark S. Dortch, Raymond S. Chapman and Steven R. Abt, HY June 92, p831-848.

Pollution

Longitudinal Dispersion Coefficients in Estuary, I. Guymer and J. R. West, HY May 92, p718-734.

Polynomials

Spline Interpolations for Water Hammer Analysis, I. A. Sibetheros, E. R. Holley and J. M. Branski, HY Oct. 91, p1332-1351.

Pools

Modeling Low-Flow Mixing through Pools and Riffles, Il Won Seo and W. Hall C. Maxwell, HY Oct. 92, p1406-1423.

Predictions

Entrainment of Bed Sediment Into Suspension, Marcelo Garcia and Gary Parker, HY Apr. 91, p414-435.

Prediction Method for Local Scour by Warmed Cooling-Water Jets, S. Ushijima, T. Shimizu, A. Sasaki and Y. Takizawa, HY Aug. 92, p1164-1183.

Pressure distribution

Fluctuating Uplift and Lining Design in Spillway Stilling Basins, Virgilio Fiorotto and Andrea Rinaldo, HY Apr. 92, p578-596.

Optimum Location of Drains in Concrete Dams, A. S. Chawla, R. K. Thakur and Akhilesh Kumar, HY July 90, p930-943.

Pressure measurement

Leaks in Pipe Networks, Ranko S. Pudar and James A. Liggett, HY July 92, p1031-1046.

Pressures

Influence of Liquid Length Variation in Hydraulic Transients, Enrique Cabrera, José Abreu, Rafael Pérez and Antonio Vela, HY Dec. 92, p1639-1650.

Probabilistic methods

Reliability-Based Pier Scour Engineering, Peggy A. Johnson, HY Oct. 92, p1344-1358.

Variation of Velocity Distribution along Nonuniform Open-Channel Flow, Chao-Lin Chiu and David W. Murray, HY July 92, p989-1001.

Probability distribution

Vertical Sediment Distribution, Jin Ren Ni and Guang Qian Wang, HY Sept. 91, p1184-1194.

Profile measurement

Hydraulic Geometry of Threshold Channels, Panayiotis Diplas and Gregorio Vigilar, HY Apr. 92, p597-614.

Profiles

Laboratory Investigation of Beach Profiles in Tailings Disposal, Xiaosheng Fan and Jacob Masliyah, HY Nov. 90, p1357-1373.

Quadratic formulas

Conversion Between Quadratic and Power Law for Non-Darcy Flow, G. H. George and D. Hansen, HY May 92, p792-797.

Rain gages

Short-Duration Rainfalls in Sicily, Giovanni B. Ferreri and Vito Ferro, HY Mar. 90, p430-435.

Rainfall

Rainfall Intensity-Duration-Frequency Formula for India, Umesh C. Kothyari and Ramchandra J. Garde, HY Feb. 92, p323-336.

Rainfall duration

Rainfall Intensity-Duration-Frequency Formula for India, Umesh C. Kothyari and Ramchandra J. Garde, HY Feb. 92, p323-336.

Short-Duration Rainfalls in Sicily, Giovanni B. Ferreri and Vito Ferro, HY Mar. 90, p430-435.

Rainfall frequency

Rainfall Intensity-Duration-Frequency Formula for India, Umesh C. Kothyari and Ramchandra J. Garde, HY Feb. 92, p323-336.

Rainfall intensity

Rainfall Intensity-Duration-Frequency Formula for India, Umesh C. Kothyari and Ramchandra J. Garde, HY Feb. 92, p323-336.

Rainfall-runoff relationships

Investigation of Curve Number Procedure, Allen T. Hjelmfelt, Jr., HY June 91, p725-737.

Recreation

Drownproofing of Low Overflow Structures, Hans J. Leutheusser and Warren M. Birk, HY Feb. 91, p205-213.

Redundancy

Entropy-Based Redundancy Measures in Water-Distribution Networks, Kofi Awumah, Ian Goulter and Suresh K. Bhatt, HY May 91, p595-614.

Regional analysis

Rainfall Intensity-Duration-Frequency Formula for India, Umesh C. Kothyari and Ramchandra J. Garde, HY Feb. 92, p323-336.

Review of Geostatistics in Geohydrology: I. Basic Concepts, ASCE Task Committee on Geostatistical Techniques in Geohydrology of the Ground Water Hydrology Committee of the ASCE Hydraulics Division, HY May 90, p612-632.

Regression analysis

Conversion Between Quadratic and Power Law for Non-Darcy Flow, G. H. George and D. Hansen, HY May 92, p792-797.

Rehabilitation

Design-Basis Flood for Rehabilitation of Existing Dams, Anand Prakash, HY Feb. 92, p291-305.

Future Trends and Needs in Hydraulics, Daryl B. Simons, HY Dec. 92, p1607-1620.

Reliability

Entropy-Based Redundancy Measures in Water-Distribution Networks, Kofi Awumah, Ian Goulter and Suresh K. Bhatt, HY May 91, p595-614.

Optimization-Availability-Based Design of Water-Distribution Networks, M. John Cullinane, Kevin E. Lansey and Larry W. Mays, HY Mar. 92, p420-441.

Reliability analysis

Assessing Time-Variant Bridge Reliability Due to Pier Scour, Peggy A. Johnson and Bilal M. Ayyub, HY June 92, p887-903.

Calibration Strategy for Urban Catchment Parameters, Yaacob Ibrahim and Shie-Yui Liong, HY Nov. 92, p1550-1570.

Reservoir operation

Reservoir Sedimentation. II: Reservoir Desiltation and Long-Term Storage Capacity, Jiahua Fan and Gregory L. Morris, HY Mar. 92, p370-384.

Reservoir performance

Reservoir Sedimentation. II: Reservoir Desiltation and Long-Term Storage Capacity, Jiahua Fan and Gregory L. Morris, HY Mar. 92, p370-384.

Reservoir sedimentation

Reservoir Sedimentation. I: Delta and Density Current Deposits, Jiahua Fan and Gregory L. Morris, HY Mar. 92, p354-369.

Reservoir Sedimentation. II: Reservoir Desiltation and Long-Term Storage Capacity, Jiahua Fan and Gregory L. Morris, HY Mar. 92, p370-384.

Reservoirs

Density Currents Entering Lakes and Reservoirs, Vahid Alavian, Gerhard H. Jirka, Richard A. Denton, Marc C. Johnson and Heinz G. Stefan, HY Nov. 92, p1464-1489.

Destruction of Stratification By Bubble Plume, W. D. Baines and A. M. Leitch, HY Apr. 92, p559-577.

Preliminary Sizing of Detention Reservoirs to Reduce Peak Discharges, Bruce M. McEnroe, HY Nov. 92, p1540-1549.

Reservoir Sedimentation. I: Delta and Density Current Deposits, Jiahua Fan and Gregory L. Morris, HY Mar. 92, p354-369.

Reservoir Sedimentation. II: Reservoir Desiltation and Long-Term Storage Capacity, Jiahua Fan and Gregory L. Morris, HY Mar. 92, p370-384.

Use of Density Current to Modify Thermal Structure of TVA Reservoirs, Vahid Alavian and Pete Ostrowski, Jr., HY May 92, p688-706.

Resistance coefficients

Dimensionally Homogeneous Manning's Formula, Ben Chie Yen, HY Sept. 92, p1326-1332.

Reynolds stress

Effects of Porous Bed on Turbulent Stream Flow above Bed, Cesar Mendoza and Donghuo Zhou, HY Sept. 92, p1222-1240.

Riffles

Modeling Low-Flow Mixing through Pools and Riffles, Il Won Seo and W. Hall C. Maxwell, HY Oct. 92, p1406-1423.

Riprap

Flow Resistance of Riprap, Stephen T. Maynord, HY June 91, p687-696.

Risk analysis

Reliability-Based Pier Scour Engineering, Peggy A. Johnson, HY Oct. 92, p1344-1358.

River beds

Bed-Load Coefficients, Raul Pacheco-Ceballos, HY Oct. 92, p1436-1442.

Rivers

Menu of Coupled Velocity and Sediment-Discharge Relations for Rivers, M. Fazle Karim and John F. Kennedy, HY Aug. 90, p978-996.

Properties of Various Sediment Sampling Procedures, Panayiotis Diplas and Jon B. Fripp, HY July 92, p955-970.

Proposed Similarity Law for Surface Velocity in Hydraulic Models, Dajin Yu and Weijun Zhao, HY Sept. 92, p1318-1325.

Scour Downstream of Grade-Control Structures, Noel E. Bormann and Pierre Y. Julien, HY May 91, p579-594.

Sediment and Aquatic Habitat in River Systems, ASCE Task Committee on Sediment Transport and Aquatic Habitats, Sedimentation Committee, HY May 92, p669-687.

Sediment Management with Submerged Vanes. II: Applications, A. Jacob Odgaard and Yalin Wang, HY Mar. 91, p284-302.

Stochastic Theory for Irregular Stream Modeling. Part I: Flow Resistance, Shu-Guang Li, Lakshmi Venkataraman and Dennis McLaughlin, HY Aug. 92, p1079-1090.

Turbulence Characteristics of Sediment-Laden Flows in Open Channels, D. A. Lyn, HY July 92, p971-988.

Roughness

Dimensionally Homogeneous Manning's Formula, Ben Chie Yen, HY Sept. 92, p1326-1332.

Flow Resistance of Riprap, Stephen T. Maynord, HY June 91, p687-696.

Menu of Coupled Velocity and Sediment-Discharge Relations for Rivers, M. Fazle Karim and John F. Kennedy, HY Aug. 90, p978-996.

Stochastic Theory for Irregular Stream Modeling. Part I: Flow Resistance, Shu-Guang Li, Lakshmi Venkataraman and Dennis McLaughlin, HY Aug. 92, p1079-1090.

Runoff

Conceptual Basis of Seasonal Streamflow Time Series Models, Jose D. Salas and J. T. B. Obeysekera, HY Aug. 92, p1186-1194.

Investigation of Curve Number Procedure, Allen T. Hjelmfelt, Jr., HY June 91, p725-737.

New Look at Regional Flood-Frequency Relations for Arid Lands, Hjalmar W. Hjalmarson and Blakemore E. Thomas, HY June 92, p868-886.

Stepwise Disaggregation Scheme for Synthetic Hydrology, Emidio G. Santos and Jose D. Salas, HY May 92, p765-784.

Safety engineering

Drownproofing of Low Overflow Structures, Hans J. Leutheusser and Warren M. Birk, HY Feb. 91, p205-213.

Safety factors

Reliability-Based Pier Scour Engineering, Peggy A. Johnson, HY Oct. 92, p1344-1358.

Salt water intrusion

Effects of Sea-Level Rise on Bays and Estuaries, ASCE Task Committee on Sea-Level Rise and Its Effects on Bays and Estuaries, HY Jan. 92, p1-10.

Saltation

Bed-Load Transport on Transverse Slope. I, Masato Sekine and Gary Parker, HY Apr. 92, p513-535.

Mechanics of Saltating Grains. II, Masato Sekine and Hideo Kikkawa, HY Apr. 92, p536-558.

Sampling

New Total Sediment-Load Sampler, Leo C. van Rijn and Moustafa T. K. Gaweesh, HY Dec. 92, p1686-1691.

Properties of Various Sediment Sampling Procedures, Panayiotis Diplas and Jon B. Fripp, HY July 92, p955-970.

Sampling designs

Properties of Various Sediment Sampling Procedures, Panayiotis Diplas and Jon B. Fripp, HY July 92, p955-970.

Sand

Hyperconcentrated Sand-Water Mixture Flows over Erodible Bed, Johan C. Winterwerp, Willem T. Bakker, Dick R. Mastbergen and Henk van Rossum, HY Nov. 92, p1508-1525.

Sandbars

Hyperconcentrated Sand-Water Mixture Flows over Erodible Bed, Johan C. Winterwerp, Willem T. Bakker, Dick R. Mastbergen and Henk van Rossum, HY Nov. 92, p1508-1525.

Sanitary sewers

Head Losses in Storm Sewer Manholes: Submerged Jet Theory, Flemming Bo Pedersen and Ole Mark, HY Nov. 90, p1317-1328.

Scale models

Flow and Energy Dissipation Over Stepped Gabion Weirs, L. Peyras, P. Royet and G. Degoutte, HY May 92, p707-717.

Scour

Assessing Time-Variant Bridge Reliability Due to Pier Scour, Peggy A. Johnson and Bilal M. Ayyub, HY June 92, p887-903.

Bridge Pier Scour with Debris Accumulation, Bruce W. Melville and D. M. Dongol, HY Sept. 92, p1306-1310.

Controlling Mechanism of Local Scouring, Bijan Dargahi, HY Oct. 90, p1197-1214.

Effect of Spoilers on Scour at Submarine Pipelines, Yee-Meng Chiew, HY Sept. 92, p1311-1317.

Effects of Footing Location on Bridge Pier Scour, J. Sterling Jones, Roger T. Kilgore and Mark P. Mistichelli, HY Feb. 92, p280-290.

Local Scour at Bridge Abutments, B. W. Melville, HY Apr. 92, p615-631.

Prediction Method for Local Scour by Warmed Cooling-Water Jets, S. Ushijima, T. Shimizu, A. Sasaki and Y. Takizawa, HY Aug. 92, p1164-1183.

Reliability-Based Pier Scour Engineering, Peggy A. Johnson, HY Oct. 92, p1344-1358.

Scour Downstream of Grade-Control Structures, Noel E. Bormann and Pierre Y. Julien, HY May 91, p579-594.

Scour Protection at Bridge Piers, Yee-Meng Chiew, HY Sept. 92, p1260-1269.

Study of Time-Dependent Local Scour Around Bridge Piers, A. Melih Yanmaz and H. Doğan Altınbilek, HY Oct. 91, p1247-1268.

Temporal Variation of Scour Around Circular Bridge Piers, Umesh C. Kothyari, Ramchandra J. Garde and Kittur G. Ranga Raju, HY Aug. 92, p1091-1106.

Scouring

Controlling Mechanism of Local Scouring, Bijan Dargahi, HY Oct. 90, p1197-1214.

Sea floor

Hyperconcentrated Sand-Water Mixture Flows over Erodible Bed, Johan C. Winterwerp, Willem T. Bakker, Dick R. Mastbergen and Henk van Rossum, HY Nov. 92, p1508-1525.

Sea level

Effects of Sea-Level Rise on Bays and Estuaries, ASCE Task Committee on Sea-Level Rise and Its Effects on Bays and Estuaries, HY Jan. 92, p1-10.

Seasonal variations

Conceptual Basis of Seasonal Streamflow Time Series Models, Jose D. Salas and J. T. B. Obeysekera, HY Aug. 92, p1186-1194.

Secondary flow

Drownproofing of Low Overflow Structures, Hans J. Leutheusser and Warren M. Birk, HY Feb. 91, p205-213.

Sediment

Bed-Load and Suspended-Load Transport of Nonuniform Sediments, Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY June 91, p774-787.

Cohesionless Fine-Sediment Bed Forms in Shallow Flows, Peter A. Mantz, HY May 92, p743-764.

Drag Coefficient and Fall Velocity of Nonspherical Particles, Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY May 91, p660-667.

Properties of Various Sediment Sampling Procedures, Panayiotis Diplas and Jon B. Fripp, HY July 92, p955-970.

Thermal Stratification Modeling of Lakes with Sediment Heat Flux, Ting-Kuei Tsay, Gordon J. Ruggaber, Steven W. Effler and Charles T. Driscoll, HY Mar. 92, p407-419.

Velocity Distribution in Uniform Sediment-Laden Flow, Motohiko Umeyama and Franciscus Gerritsen, HY Feb. 92, p229-245.

Sediment concentration

First Step Away from Lacey's Regime Equations, Michael A. Stevens and Carl F. Nordin, Jr., HY Nov. 90, p1422-1425.

Vertical Distribution of Suspended Sediment in Uniform Open-Channel Flow, Motohiko Umeyama, HY June 92, p936-941.

Vertical Sediment Distribution, Jin Ren Ni and Guang Qian Wang, HY Sept. 91, p1184-1194.

Sediment control

Sediment Management with Submerged Vanes. II: Applications, A. Jacob Odgaard and Yalin Wang, HY Mar. 91, p284-302.

Sediment load

Aggradation-Degradation Process in Alluvial Channels, Chin-lien Yen, Shou-young Chang and Hong-Yuan Lee, HY Dec. 92, p1651-1669.

New Total Sediment-Load Sampler, Leo C. van Rijn and Moustafa T. K. Gaweesh, HY Dec. 92, p1686-1691.

Suspended Sediment-Transport Capacity for Open Channel Flow, Ismail Celik and Wolfgang Rodi, HY Feb. 91, p191-204.

Vertical Distribution of Suspended Sediment in Uniform Open-Channel Flow, Motohiko Umeyama, HY June 92, p936-941.

Sediment transport

Aggradation-Degradation Process in Alluvial Channels, Chin-lien Yen, Shou-young Chang and Hong-Yuan Lee, HY Dec. 92, p1651-1669.

Bed-Load Coefficients, Raul Pacheco-Ceballos, HY Oct. 92, p1436-1442.

Conceptual Bed-Load Transport Model and Verification for Sediment Mixtures, Shaohua Marko Hsu and Forrest M. Holly, Jr., HY Aug. 92, p1135-1152.

Controlling Mechanism of Local Scouring, Bijan Dargahi, HY Oct. 90, p1197-1214.

Development of Bed Features, Arved J. Raudkivi and Hans-H. Witte, HY Sept. 90, p1063-1079.

First Step Away from Lacey's Regime Equations, Michael A. Stevens and Carl F. Nordin, Jr., HY Nov. 90, p1422-1425.

Fully Coupled Unsteady Mobile Boundary Flow Model (FCM), Luís R.P. Correia, Bommanna G. Krishnappan and Walter H. Graf, HY Mar. 92, p476-494.

Incipient Motion during Static Armoring, Anders Wörman, HY Mar. 92, p496-501.

Laboratory Investigation of Beach Profiles in Tailings Disposal, Xiaosheng Fan and Jacob Masliyah, HY Nov. 90, p1357-1373.

Menu of Coupled Velocity and Sediment-Discharge Relations for Rivers, M. Fazle Karim and John F. Kennedy, HY Aug. 90, p978-996.

New Total Sediment-Load Sampler, Leo C. van Rijn and Moustafa T. K. Gaweesh, HY Dec. 92, p1686-1691.

Note on Lag in Bedload Discharge, Subhash C. Jain, HY June 92, p904-917.

River Bed Degradation Due to Abrupt Outfall Lowering, C. W. Lenau and A. T. Hjelmfelt, Jr., HY June 92, p918-933.

Routing of Heterogeneous Sediments over Movable Bed: Model Development, Andre van Niekerk, Koen R. Vogel, Rudy L. Slingerland and John S. Bridge, HY Feb. 92, p246-262.

Routing of Heterogeneous Sediments over Movable Bed: Model Verification, Koen R. Vogel, Andre van Niekerk, Rudy L. Slingerland and John S. Bridge, HY Feb. 92, p263-279.

Scour Downstream of Grade-Control Structures, Noel E. Bormann and Pierre Y. Julien, HY May 91, p579-594.

Sediment and Aquatic Habitat in River Systems, ASCE Task Committee on Sediment Transport and Aquatic Habitats, Sedimentation Committee, HY May 92, p669-687.

Sediment Management with Submerged Vanes. II: Applications, A. Jacob Odgaard and Yalin Wang, HY Mar. 91, p284-302.

Suspended Sediment-Transport Capacity for Open Channel Flow, Ismail Celik and Wolfgang Rodi, HY Feb. 91, p191-204.

Sedimentation

Bridge Pier Scour with Debris Accumulation, Bruce W. Melville and D. M. Dongol, HY Sept. 92, p1306-1310.

Local Scour at Bridge Abutments, B. W. Melville, HY Apr. 92, p615-631.

Menu of Coupled Velocity and Sediment-Discharge Relations for Rivers, M. Fazle Karim and John F. Kennedy, HY Aug. 90, p978-996.

Resistance in Flat-Bed Sediment-Laden Flows, D. A. Lyn, HY Jan. 91, p94-114.

River Bed Degradation Due to Abrupt Outfall Lowering, C. W. Lenau and A. T. Hjelmfelt, Jr., HY June 92, p918-933.

Routing Debris Flows with Particle Segregation, Tamotsu Takahashi, Hajime Nakagawa, Tatsuo Harada and Yousuke Yamashiki, HY Nov. 92, p1490-1507.

Sediment and Aquatic Habitat in River Systems, ASCE Task Committee on Sediment Transport and Aquatic Habitats, Sedimentation Committee, HY May 92, p669-687.

Turbulence Characteristics of Sediment-Laden Flows in Open Channels, D. A. Lyn, HY July 92, p971-988.

Sedimentation tanks

Density Currents and Shear-Induced Flocculation in Sedimentation Tanks, D. A. Lyn, A. I. Stamou and W. Rodi, HY June 92, p849-867.

Modeling of Rectangular Settling Tanks, Siping Zhou and John A. McCorquodale, HY Oct. 92, p1391-1405.

Separation

Separation of Skewness: Reality or Regional Artifact? Fahim Ashkar, Bernard Bobée and Jacques Bernier, HY Mar. 92, p460-475.

Settlement analysis

Small Parshall Flume Rating Correction, Steven R. Abt, Christopher Cook, Kenneth J. Staker and Derek D. Johns, HY May 92, p798-803.

Settling velocity

Modeling of Rectangular Settling Tanks, Siping Zhou and John A. McCorquodale, HY Oct. 92, p1391-1405.

Sewer design

Head Losses in Storm Sewer Manholes: Submerged Jet Theory, Flemming Bo Pedersen and Ole Mark, HY Nov. 90, p1317-1328.

Shallow water

Cohesionless Fine-Sediment Bed Forms in Shallow Flows, Peter A. Mantz, HY May 92, p743-764.

Tide and Storm Surge Predictions Using Finite Element Model, J. J. Westerink, R. A. Luettich, A. M. Baptista, N. W. Scheffner and P. Farrar, HY Oct. 92, p1373-1390.

Shear flow

Momentum and Energy Coefficients Based on Power-Law Velocity Profile, Cheng-lung Chen, HY Nov. 92, p1571-1584.

Shear stress

Boundary Shear Stress and Roughness Over Mobile Alluvial Beds, Peter J. Whiting and William E. Dietrich, HY Dec. 90, p1495-1511.

Cohesionless Fine-Sediment Bed Forms in Shallow Flows, Peter A. Mantz, HY May 92, p743-764.

Flow Field Induced by Sea Waves Over Brick-Pattern Ripples, G. Vittori, HY Sept. 92, p1241-1259.

Measurement and Prediction of Surface Shear Stress in Annular Flume, D. I. Graham, P. W. James, T. E. R. Jones, J. M. Davies and E. A. Delo, HY Sept. 92, p1270-1286.

Motion of Contact-Load Particles at High Shear Stress, Fidelia N. Nnadi and Kenneth C. Wilson, HY Dec. 92, p1670-1684.

Shoaling

Sediment Management with Submerged Vanes. II: Applications, A. Jacob Odgaard and Yalin Wang, HY Mar. 91, p284-302.

Simulation

Assessing Time-Variant Bridge Reliability Due to Pier Scour, Peggy A. Johnson and Bilal M. Ayyub, HY June 92, p887-903.

Size

Mean Size Distribution of Bed Load on Goodwin Creek, Roger A. Kuhnle and Joe C. Willis, HY Oct. 92, p1443-1446.

Size effect

Aggradation-Degradation Process in Alluvial Channels, Chin-lien Yen, Shou-young Chang and Hong-Yuan Lee, HY Dec. 92, p1651-1669.

Skewness

Confidence Interval for Design Floods with Estimated Skew Coefficient, Jahir Uddin Chowdhury and Jery R. Stedinger, HY July 91, p811-831.

Separation of Skewness: Reality or Regional Artifact? Fahim Ashkar, Bernard Bobée and Jacques Bernier, HY Mar. 92, p460-475.

Slabs

Force on Slab Beneath Hydraulic Jump, Javad Farhoudi and Rangaswami Narayanan, HY Jan. 91, p64-82.

Slopes

Bed-Load Transport on Transverse Slope. I, Masato Sekine and Gary Parker, HY Apr. 92, p513-535.

Hyperconcentrated Sand-Water Mixture Flows over Erodible Bed, Johan C. Winterwerp, Willem T. Bakker, Dick R. Mastbergen and Henk van Rossum, HY Nov. 92, p1508-1525.

Velocity Profiles in Steep Open-Channel Flows, Akihiro Tominaga and Iehisa Nezu, HY Jan. 92, p73-90.

Slots

Scour Protection at Bridge Piers, Yee-Meng Chiew, HY Sept. 92, p1260-1269.

Soils, unsaturated

Comparative Survey of Four Unsaturated Soil Flow Equations, Abbas A. Fiuzat and David W. Moughton, HY May 92, p786-791.

Spillways

Air Entrainment by Spillway Aerators, Peter Rutschmann and Willi H. Hager, HY June 90, p765-782.

Drownproofing of Low Overflow Structures, Hans J. Leutheusser and Warren M. Birk, HY Feb. 91, p205-213.

Flow and Energy Dissipation Over Stepped Gabion Weirs, L. Peyras, P. Royet and G. Degoutte, HY May 92, p707-717.

Fluctuating Uplift and Lining Design in Spillway Stilling Basins, Virgilio Fiorotto and Andrea Rinaldo, HY Apr. 92, p578-596.

HGL Elevation at Pipe Exit of USBR Type VI Impact Basin, Charles E. Rice and Kem C. Kadavy, HY July 91, p929-933.

Pipe Plunge Pool Energy Dissipator, Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323.

Skimming Flow in Stepped Spillways, N. Rajaratnam, HY Apr. 90, p587-591.

Uniform Aerated Chute Flow, Willi H. Hager, HY Apr. 91, p528-533.

Spoilers

Effect of Spoilers on Scour at Submarine Pipelines, Yee-Meng Chiew, HY Sept. 92, p1311-1317.

Stability

Momentum and Energy Coefficients Based on Power-Law Velocity Profile, Cheng-lung Chen, HY Nov. 92, p1571-1584.

Nonlinear Stability of Differential Surge Chambers, Xiao-Liang Yang and Chen-Shan Kung, HY Nov. 92, p1526-1539.

Wave-Motion Stability in Canals with Automatic Controllers, Simion Hancu and Paul Dan, HY Dec. 92, p1621-1638.

Stability analysis

Fully Coupled Unsteady Mobile Boundary Flow Model (FCM), Luís R.P. Correia, Bommanna G. Krishnappan and Walter H. Graf, HY Mar. 92, p476-494.

Stable channels

Hydraulic Geometry of Threshold Channels, Panayiotis Diplas and Gregorio Vigilar, HY Apr. 92, p597-614.

State-of-the-art reviews

Effects of Sea-Level Rise on Bays and Estuaries, ASCE Task Committee on Sea-Level Rise and Its Effects on Bays and Estuaries, HY Jan. 92, p1-10.

Statistical analysis

Effect of Drought on Urban Water Supplies. I: Drought Analysis, David M. Frick, Dennis Bode and Jose D. Salas, HY June 90, p733-753.

Fluctuating Uplift and Lining Design in Spillway Stilling Basins, Virgilio Fiorotto and Andrea Rinaldo, HY Apr. 92, p578-596.

New Look at Regional Flood-Frequency Relations for Arid Lands, Hjalmar W. Hjalmarson and Blakemore E. Thomas, HY June 92, p868-886.

Short-Duration Rainfalls in Sicily, Giovanni B. Ferreri and Vito Ferro, HY Mar. 90, p430-435.

Statistical distributions

Separation of Skewness: Reality or Regional Artifact? Fahim Ashkar, Bernard Bobée and Jacques Bernier, HY Mar. 92, p460-475.

Statistics

Review of Geostatistics in Geohydrology: I. Basic Concepts, ASCE Task Committee on Geostatistical Techniques in Geohydrology of the Ground Water Hydrology Committee of the ASCE Hydraulics Division, HY May 90, p612-632.

Review of Ground-Water Quality Monitoring Network Design, Hugo A. Loaiciga, Randall J. Charbeneau, Lorne G. Everett, Graham E. Fogg, Benjamin F. Hobbs and Shahrokh Rouhani, HY Jan. 92, p11-37.

Stilling basins

Fluctuating Uplift and Lining Design in Spillway Stilling Basins, Virgilio Fiorotto and Andrea Rinaldo, HY Apr. 92, p578-596.

Force on Slab Beneath Hydraulic Jump, Javad Farhoudi and Rangaswami Narayanan, HY Jan. 91, p64-82.

Pipe Plunge Pool Energy Dissipator, Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323.

Stochastic models

Conceptual Basis of Seasonal Streamflow Time Series Models, Jose D. Salas and J. T. B. Obeysekera, HY Aug. 92, p1186-1194.

Effect of Drought on Urban Water Supplies. I: Drought Analysis, David M. Frick, Dennis Bode and Jose D. Salas, HY June 90, p733-753.

Mechanics of Saltating Grains. II, Masato Sekine and Hideo Kikkawa, HY Apr. 92, p536-558.

Stochastic processes

Adaptive Parameter Estimation for Multisite Hydrologic Forecasting, Haitham M. Awwad and Juan B. Valdés, HY Sept. 92, p1201-1221.

Stepwise Disaggregation Scheme for Synthetic Hydrology, Emidio G. Santos and Jose D. Salas, HY May 92, p765-784.

Stochastic Theory for Irregular Stream Modeling. Part I: Flow Resistance, Shu-Guang Li, Lakshmi Venkataraman and Dennis McLaughlin, HY Aug. 92, p1079-1090.

Storage

Type Curves for a Slug Test in an Infinitely or Semi-infinitely Thick Aquifer, Gary R. Chirlin, (*Symposium on Ground Water*, Gerard P. Lennon, ed. and Shakrokh Rouhani, ed., 1991), p169-174.

Storm drainage

Trash Rack Blockage in Supercritical Flow, Steven R. Abt, Thomas E. Brisbane, David M. Frick and Charles A. McKnight, HY Dec. 92, p1692-1696.

Storm sewers

Head Losses in Storm Sewer Manholes: Submerged Jet Theory, Flemming Bo Pedersen and Ole Mark, HY Nov. 90, p1317-1328.

Storm surges

1-D Open-Channel Flow Simulation Using TVD-McCormack Scheme, P. García-Navarro, F. Alcrudo and J. M. Savirón, HY Oct. 92, p1359-1372.

Tide and Storm Surge Predictions Using Finite Element Model, J. J. Westerink, R. A. Luettich, A. M. Baptista, N. W. Scheffner and P. Farrar, HY Oct. 92, p1373-1390.

Stormwater

Preliminary Sizing of Detention Reservoirs to Reduce Peak Discharges, Bruce M. McEnroe, HY Nov. 92, p1540-1549.

Stormwater management

Preliminary Sizing of Detention Reservoirs to Reduce Peak Discharges, Bruce M. McEnroe, HY Nov. 92, p1540-1549.

Stratification

Destruction of Stratification By Bubble Plume, W. D. Baines and A. M. Leitch, HY Apr. 92, p559-577.

Stratified flow

Modeling Vertical Structure of Open-Channel Flows, Alan F. Blumberg, Boris Galperin and Donald J. O'Connor, HY Aug. 92, p1119-1134.

Streambed armoring

Incipient Motion during Static Armoring, Anders Wörman, HY Mar. 92, p496-501.

Streambeds

Incipient Motion during Static Armoring, Anders Wörman, HY Mar. 92, p496-501.

Routing of Heterogeneous Sediments over Movable Bed: Model Development, Andre van Niekerk, Koen R. Vogel, Rudy L. Slingerland and John S. Bridge, HY Feb. 92, p246-262.

Routing of Heterogeneous Sediments over Movable Bed: Model Verification, Koen R. Vogel, Andre van Niekerk, Rudy L. Slingerland and John S. Bridge, HY Feb. 92, p263-279.

Temporal Variation of Scour Around Circular Bridge Piers, Umesh C. Kothyari, Ramchandra J. Garde and Kittur G. Ranga Raju, HY Aug. 92, p1091-1106.

Streamflow

Conceptual Basis of Seasonal Streamflow Time Series Models, Jose D. Salas and J. T. B. Obeysekera, HY Aug. 92, p1186-1194.

Physically Based Flood Features and Frequencies, Hsieh Wen Shen, Gregory John Koch and Jayantha T. B. Obeysekera, HY Apr. 90, p494-514.

Stepwise Disaggregation Scheme for Synthetic Hydrology, Emidio G. Santos and Jose D. Salas, HY May 92, p765-784.

Streamflow forecasting

Adaptive Parameter Estimation for Multisite Hydrologic Forecasting, Haitham M. Awwad and Juan B. Valdés, HY Sept. 92, p1201-1221.

Streams

Mean Size Distribution of Bed Load on Goodwin Creek, Roger A. Kuhnle and Joe C. Willis, HY Oct. 92, p1443-1446.

New Look at Regional Flood-Frequency Relations for Arid Lands, Hjalmar W. Hjalmarson and Blakemore E. Thomas, HY June 92, p868-886.

Properties of Various Sediment Sampling Procedures, Panayiotis Diplas and Jon B. Fripp, HY July 92, p955-970.

Streets

Discharge Capacity for Curb-Opening Inlets, Ali Uyumaz, HY July 92, p1048-1051.

Structural reliability

Assessing Time-Variant Bridge Reliability Due to Pier Scour, Peggy A. Johnson and Bilal M. Ayyub, HY June 92, p887-903.

Subcritical flow

Evaluation of Supercritical/Subcritical Flows in High-Gradient Channel, Douglas J. Trieste, HY Aug. 92, p1107-1118.

Submarine pipelines

Effect of Spoilers on Scour at Submarine Pipelines, Yee-Meng Chiew, HY Sept. 92, p1311-1317.

Submerged vanes

Sediment Management with Submerged Vanes. II: Applications, A. Jacob Odgaard and Yalin Wang, HY Mar. 91, p284-302.

Supercritical flow

Evaluation of Supercritical/Subcritical Flows in High-Gradient Channel, Douglas J. Trieste, HY Aug. 92, p1107-1118.

Trash Rack Blockage in Supercritical Flow, Steven R. Abt, Thomas E. Brisbane, David M. Frick and Charles A. McKnight, HY Dec. 92, p1692-1696.

Surface waters

Proposed Similarity Law for Surface Velocity in Hydraulic Models, Dajin Yu and Weijun Zhao, HY Sept. 92, p1318-1325.

Surge

Nonlinear Stability of Differential Surge Chambers, Xiao-Liang Yang and Chen-Shan Kung, HY Nov. 92, p1526-1539.

Suspended load

Bed-Load and Suspended-Load Transport of Nonuniform Sediments, Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY June 91, p774-787.

New Total Sediment-Load Sampler, Leo C. van Rijn and Moustafa T. K. Gaweesh, HY Dec. 92, p1686-1691.

Prediction Method for Local Scour by Warmed Cooling-Water Jets, S. Ushijima, T. Shimizu, A. Sasaki and Y. Takizawa, HY Aug. 92, p1164-1183.

Suspended sediments

Entrainment of Bed Sediment Into Suspension, Marcelo Garcia and Gary Parker, HY Apr. 91, p414-435.

Suspended Sediment-Transport Capacity for Open Channel Flow, Ismail Celik and Wolfgang Rodi, HY Feb. 91, p191-204.

Vertical Sediment Distribution, Jin Ren Ni and Guang Qian Wang, HY Sept. 91, p1184-1194.

Synthetic hydrology

Stepwise Disaggregation Scheme for Synthetic Hydrology, Emidio G. Santos and Jose D. Salas, HY May 92, p765-784.

Tailings

Laboratory Investigation of Beach Profiles in Tailings Disposal, Xiaosheng Fan and Jacob Masliyah, HY Nov. 90, p1357-1373.

Tailwater

HGL Elevation at Pipe Exit of USBR Type VI Impact Basin, Charles E. Rice and Kem C. Kadavy, HY July 91, p929-933.

Temperature

Thermal Stratification Modeling of Lakes with Sediment Heat Flux, Ting-Kuei Tsay, Gordon J. Ruggaber, Steven W. Effler and Charles T. Driscoll, HY Mar. 92, p407-419.

Temperature effects

Effects of Sea-Level Rise on Bays and Estuaries, ASCE Task Committee on Sea-Level Rise and Its Effects on Bays and Estuaries, HY Jan. 92, p1-10.

Tests

Pipe Plunge Pool Energy Dissipator, Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323.

Type Curves for a Slug Test in an Infinitely or Semi-infinitely Thick Aquifer, Gary R. Chirlin, (*Symposium on Ground Water*, Gerard P. Lennon, ed. and Shakrokh Rouhani, ed., 1991), p169-174.

Thermal factors

Use of Density Current to Modify Thermal Structure of TVA Reservoirs, Vahid Alavian and Pete Ostrowski, Jr., HY May 92, p688-706.

Thermal stratification

Thermal Stratification Modeling of Lakes with Sediment Heat Flux, Ting-Kuei Tsay, Gordon J. Ruggaber, Steven W. Effler and Charles T. Driscoll, HY Mar. 92, p407-419.

Three-dimensional models

Application of Three-Dimensional Lagrangian Residual Transport, Mark S. Dortch, Raymond S. Chapman and Steven R. Abt, HY June 92, p831-848.

The Hopscotch Algorithm for Three-Dimensional Simulation, Geneviève Ségol, HY Mar. 92, p385-406.

Tidal currents

Application of Three-Dimensional Lagrangian Residual Transport, Mark S. Dortch, Raymond S. Chapman and Steven R. Abt, HY June 92, p831-848.

Tidal hydraulics

Lagrangian Solution of St. Venant's Equations for Alluvial Estuary, Hubert H. G. Savenije, HY Aug. 92, p1153-1163.

Tidal waters

Application of Three-Dimensional Lagrangian Residual Transport, Mark S. Dortch, Raymond S. Chapman and Steven R. Abt, HY June 92, p831-848.

Tide and Storm Surge Predictions Using Finite Element Model, J. J. Westerink, R. A. Luettich, A. M. Baptista, N. W. Scheffner and P. Farrar, HY Oct. 92, p1373-1390.

Tides

Longitudinal Dispersion Coefficients in Estuary, I. Guymer and J. R. West, HY May 92, p718-734.

Time dependence

Study of Time-Dependent Local Scour Around Bridge Piers, A. Melih Yanmaz and H. Doğan Altınbilek, HY Oct. 91, p1247-1268.

Time series analysis

Adaptive Parameter Estimation for Multisite Hydrologic Forecasting, Haitham M. Awwad and Juan B. Valdés, HY Sept. 92, p1201-1221.

Stepwise Disaggregation Scheme for Synthetic Hydrology, Emidio G. Santos and Jose D. Salas, HY May 92, p765-784.

Transfer functions

Study of Open-Channel Dynamics as Controlled Process, Yuri A. Ermolin, HY Jan. 92, p59-72.

Transient flow

Efficient Calculation of Transient Flow in Simple Pipe Networks, Bryan W. Karney and Duncan McInnis, HY July 92, p1014-1030.

Transients

Modeling Channel Bed Transients Using Explicit F-D Schemes, B. Morse and R. D. Townsend, HY Nov. 90, p1345-1356.

State-Space Analysis and Control of Slow Transients in Pipes, Masashi Shimada, HY Sept. 92, p1287-1304.

Transport phenomena

Application of Three-Dimensional Lagrangian Residual Transport, Mark S. Dortch, Raymond S. Chapman and Steven R. Abt, HY June 92, p831-848.

Suspended Sediment-Transport Capacity for Open Channel Flow, Ismail Celik and Wolfgang Rodi, HY Feb. 91, p191-204.

Transport rate

Bed-Load and Suspended-Load Transport of Nonuniform Sediments, Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY June 91, p774-787.

Trashracks

Trash Rack Blockage in Supercritical Flow, Steven R. Abt, Thomas E. Brisbane, David M. Frick and Charles A. McKnight, HY Dec. 92, p1692-1696.

Vibration of Beams and Trashracks in Parallel and Inclined Flows, Thang D. Nguyen and Eduard Naudascher, HY Aug. 91, p1056-1076.

Trends

Future Trends and Needs in Hydraulics, Daryl B. Simons, HY Dec. 92, p1607-1620.

Turbulence

Entrainment of Bed Sediment Into Suspension, Marcelo Garcia and Gary Parker, HY Apr. 91, p414-435.

Force on Slab Beneath Hydraulic Jump, Javad Farhoudi and Rangaswami Narayanan, HY Jan. 91, p64-82.

Mixing, Dispersion, and Resuspension in Vicinity of Ocean Wastewater Plume, Libe Washburn, Burton H. Jones, Alan Bratkovich, T. D. Dickey and Ming-Sue Chen, HY Jan. 92, p38-58.

Modeling Vertical Structure of Open-Channel Flows, Alan F. Blumberg, Boris Galperin and Donald J. O'Connor, HY Aug. 92, p1119-1134.

Prediction Method for Local Scour by Warmed Cooling-Water Jets, S. Ushijima, T. Shimizu, A. Sasaki and Y. Takizawa, HY Aug. 92, p1164-1183.

Resistance in Flat-Bed Sediment-Laden Flows, D. A. Lyn, HY Jan. 91, p94-114.

Solving Turbulent Flows Using Finite Elements, John I. Finnie and Roland W. Jeppson, HY Nov. 91, p1513-1530.

Turbulence Characteristics of Sediment-Laden Flows in Open Channels, D. A. Lyn, HY July 92, p971-988.

Velocity Profiles in Steep Open-Channel Flows, Akihiro Tominaga and Iehisa Nezu, HY Jan. 92, p73-90.

Turbulent diffusion

Hydraulic Geometry of Threshold Channels, Panayiotis Diplas and Gregorio Vigilar, HY Apr. 92, p597-614.

Turbulent flow

Density Currents and Shear-Induced Flocculation in Sedimentation Tanks, D. A. Lyn, A. I. Stamou and W. Rodi, HY June 92, p849-867.

Effects of Porous Bed on Turbulent Stream Flow above Bed, Cesar Mendoza and Donghuo Zhou, HY Sept. 92, p1222-1240.

Momentum and Energy Coefficients Based on Power-Law Velocity Profile, Cheng-lung Chen, HY Nov. 92, p1571-1584.

Skimming Flow in Stepped Spillways, N. Rajaratnam, HY Apr. 90, p587-591.

Turf grasses

Frictional Resistance of Overland Flow on Tropical Turfed Slope, Yee-Meng Chiew and Soon-Keat Tan, HY Jan. 92, p92-97.

Uniform flow

Uniform Aerated Chute Flow, Willi H. Hager, HY Apr. 91, p528-533.

Unsaturated flow

Comparative Survey of Four Unsaturated Soil Flow Equations, Abbas A. Fiuzat and David W. Moughton, HY May 92, p786-791.

Unsteady flow

EQSWP: Extended Unsteady-Flow Double-Sweep Equation Solver, Theodor Strelkoff, HY May 92, p735-742.

Fully Coupled Unsteady Mobile Boundary Flow Model (FCM), Luís R.P. Correia, Bommanna G. Krishnappan and Walter H. Graf, HY Mar. 92, p476-494.

Kinematic Wave Controversy, Victor M. Ponce, HY Apr. 91, p511-525.

Temporal Variation of Scour Around Circular Bridge Piers, Umesh C. Kothyari, Ramchandra J. Garde and Kittur G. Ranga Raju, HY Aug. 92, p1091-1106.

Uplift

Fluctuating Uplift and Lining Design in Spillway Stilling Basins, Virgilio Fiorotto and Andrea Rinaldo, HY Apr. 92, p578-596.

Uplift pressure

Optimum Location of Drains in Concrete Dams, A. S. Chawla, R. K. Thakur and Akhilesh Kumar, HY July 90, p930-943.

Urban areas

Calibration Strategy for Urban Catchment Parameters, Yaacob Ibrahim and Shie-Yui Liong, HY Nov. 92, p1550-1570.

Effect of Drought on Urban Water Supplies. I: Drought Analysis, David M. Frick, Dennis Bode and Jose D. Salas, HY June 90, p733-753.

Urban roads

Discharge Capacity for Curb-Opening Inlets, Ali Uyumaz, HY July 92, p1048-1051.

Vadose zone

Comparative Survey of Four Unsaturated Soil Flow Equations, Abbas A. Fiuzat and David W. Moughton, HY May 92, p786-791.

Valves

Spline Interpolations for Water Hammer Analysis, I. A. Sibetheros, E. R. Holley and J. M. Branski, HY Oct. 91, p1332-1351.

State-Space Analysis and Control of Slow Transients in Pipes, Masashi Shimada, HY Sept. 92, p1287-1304.

Variability

Review of Geostatistics in Geohydrology: I. Basic Concepts, ASCE Task Committee on Geostatistical Techniques in Geohydrology of the Ground Water Hydrology Committee of the ASCE Hydraulics Division, HY May 90, p612-632.

Vegetation

Predicting Influence of Bank Vegetation on Channel Capacity, Richard Masterman and Colin R. Thorne, HY July 92, p1052-1058.

Velocity

Drag Coefficient and Fall Velocity of Nonspherical Particles, Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY May 91, p660-667.

Effects of Porous Bed on Turbulent Stream Flow above Bed, Cesar Mendoza and Donghuo Zhou, HY Sept. 92, p1222-1240.

Proposed Similarity Law for Surface Velocity in Hydraulic Models, Dajin Yu and Weijun Zhao, HY Sept. 92, p1318-1325.

Velocity distribution

Momentum and Energy Coefficients Based on Power-Law Velocity Profile, Cheng-lung Chen, HY Nov. 92, p1571-1584.

Proposed Similarity Law for Surface Velocity in Hydraulic Models, Dajin Yu and Weijun Zhao, HY Sept. 92, p1318-1325.

Variation of Velocity Distribution along Nonuniform Open-Channel Flow, Chao-Lin Chiu and David W. Murray, HY July 92, p989-1001.

Velocity Distribution in Uniform Sediment-Laden Flow, Motohiko Umeyama and Franciscus Gerritsen, HY Feb. 92, p229-245.

Velocity profile

Modeling Vertical Structure of Open-Channel Flows, Alan F. Blumberg, Boris Galperin and Donald J. O'Connor, HY Aug. 92, p1119-1134.

Velocity Profiles in Steep Open-Channel Flows, Akihiro Tominaga and Iehisa Nezu, HY Jan. 92, p73-90.

Vertical forces

Vertical Sediment Distribution, Jin Ren Ni and Guang Qian Wang, HY Sept. 91, p1184-1194.

Vibration

Vibration of Beams and Trashracks in Parallel and Inclined Flows, Thang D. Nguyen and Eduard Naudascher, HY Aug. 91, p1056-1076.

Vortex shedding

Controlling Mechanism of Local Scouring, Bijan Dargahi, HY Oct. 90, p1197-1214.

Vortices

Analysis of Spiral Vortex and Vertical Slot Vortex Drop Shafts, Michael C. Quick, HY Mar. 90, p309-325.

Drownproofing of Low Overflow Structures, Hans J. Leutheusser and Warren M. Birk, HY Feb. 91, p205-213.

Temporal Variation of Scour Around Circular Bridge Piers, Umesh C. Kothyari, Ramchandra J. Garde and Kittur G. Ranga Raju, HY Aug. 92, p1091-1106.

Vibration of Beams and Trashracks in Parallel and Inclined Flows, Thang D. Nguyen and Eduard Naudascher, HY Aug. 91, p1056-1076.

Waste disposal

Laboratory Investigation of Beach Profiles in Tailings Disposal, Xiaosheng Fan and Jacob Masliyah, HY Nov. 90, p1357-1373.

Water discharge

Small Parshall Flume Rating Correction, Steven R. Abt, Christopher Cook, Kenneth J. Staker and Derek D. Johns, HY May 92, p798-803.

Water distribution

Efficient Calculation of Transient Flow in Simple Pipe Networks, Bryan W. Karney and Duncan McInnis, HY July 92, p1014-1030.

Entropy-Based Redundancy Measures in Water-Distribution Networks, Kofi Awumah, Ian Goulter and Suresh K. Bhatt, HY May 91, p595-614.

Optimization-Availability-Based Design of Water-Distribution Networks, M. John Cullinane, Kevin E. Lansey and Larry W. Mays, HY Mar. 92, p420-441.

Water flow

Air Entrainment by Spillway Aerators, Peter Rutschmann and Willi H. Hager, HY June 90, p765-782.

Bridge Pier Scour with Debris Accumulation, Bruce W. Melville and D. M. Dongol, HY Sept. 92, p1306-1310.

Drownproofing of Low Overflow Structures, Hans J. Leutheusser and Warren M. Birk, HY Feb. 91, p205-213.

EQSWP: Extended Unsteady-Flow Double-Sweep Equation Solver, Theodor Strelkoff, HY May 92, p735-742.

Hyperconcentrated Sand-Water Mixture Flows over Erodible Bed, Johan C. Winterwerp, Willem T. Bakker, Dick R. Mastbergen and Henk van Rossum, HY Nov. 92, p1508-1525.

Local Scour at Bridge Abutments, B. W. Melville, HY Apr. 92, p615-631.

Skimming Flow in Stepped Spillways, N. Rajaratnam, HY Apr. 90, p587-591.

Velocity Distribution in Uniform Sediment-Laden Flow, Motohiko Umeyama and Franciscus Gerritsen, HY Feb. 92, p229-245.

Wave-Motion Stability in Canals with Automatic Controllers, Simion Hancu and Paul Dan, HY Dec. 92, p1621-1638.

Water hammer

Efficient Calculation of Transient Flow in Simple Pipe Networks, Bryan W. Karney and Duncan McInnis, HY July 92, p1014-1030.

Spline Interpolations for Water Hammer Analysis, I. A. Sibetheros, E. R. Holley and J. M. Branski, HY Oct. 91, p1332-1351.

Water levels

Study of Open-Channel Dynamics as Controlled Process, Yuri A. Ermolin, HY Jan. 92, p59-72.

Water pollution

Application of Three-Dimensional Lagrangian Residual Transport, Mark S. Dortch, Raymond S. Chapman and Steven R. Abt, HY June 92, p831-848.

Mixing, Dispersion, and Resuspension in Vicinity of Ocean Wastewater Plume, Libe Washburn, Burton H. Jones, Alan Bratkovich, T. D. Dickey and Ming-Sue Chen, HY Jan. 92, p38-58.

Water quality

Application of Three-Dimensional Lagrangian Residual Transport, Mark S. Dortch, Raymond S. Chapman and Steven R. Abt, HY June 92, p831-848.

Water resources

Effect of Drought on Urban Water Supplies. I: Drought Analysis, David M. Frick, Dennis Bode and Jose D. Salas, HY June 90, p733-753.

Water resources management

Rainfall Intensity-Duration-Frequency Formula for India, Umesh C. Kothyari and Ramchandra J. Garde, HY Feb. 92, p323-336.

Water supply

Effect of Drought on Urban Water Supplies. I: Drought Analysis, David M. Frick, Dennis Bode and Jose D. Salas, HY June 90, p733-753.

Water supply systems

Optimization-Availability-Based Design of Water-Distribution Networks, M. John Cullinane, Kevin E. Lansey and Larry W. Mays, HY Mar. 92, p420-441.

Water surface

Discharge Capacity for Curb-Opening Inlets, Ali Uyumaz, HY July 92, p1048-1051.

Water transfer

Calculation of Total Conveyance in Natural Channels, J. Garbrecht and G. O. Brown, HY June 91, p788-798.

Water transportation

Two-Dimensional Leachate Estimation through Landfills, Shabbir Ahmed, Reza M. Khanbilvardi, John Fillos and Phillip J. Gleason, HY Feb. 92, p306-322.

Water use

Drownproofing of Low Overflow Structures, Hans J. Leutheusser and Warren M. Birk, HY Feb. 91, p205-213.

Waves

EQSWP: Extended Unsteady-Flow Double-Sweep Equation Solver, Theodor Strelkoff, HY May 92, p735-742.

Kinematic Wave Controversy, Victor M. Ponce, HY Apr. 91, p511-525.

Wave-Motion Stability in Canals with Automatic Controllers, Simion Hancu and Paul Dan, HY Dec. 92, p1621-1638.

Weirs

Flow and Energy Dissipation Over Stepped Gabion Weirs, L. Peyras, P. Royet and G. Degoutte, HY May 92, p707-717.

Wells

Type Curves for a Slug Test in an Infinitely or Semi-infinitely Thick Aquifer, Gary R. Chirlin, (*Symposium on Ground Water*, Gerard P. Lennon, ed. and Shakrokh Rouhani, ed., 1991), p169-174.

AUTHOR INDEX

Abreu, José
see Cabrera, Enrique, HY Dec. 92, p1639-1650

Abt, Steven R.
Analysis of ARS Low-Drop Grade-Control Structure, with Mark R. Peterson, Chester C. Watson and Scott A. Hogan, HY Oct. 92, p1424-1434
Small Parshall Flume Rating Correction, with Christopher Cook, Kenneth J. Staker and Derek D. Johns, HY May 92, p798-803
Trash Rack Blockage in Supercritical Flow, with Thomas E. Brisbane, David M. Frick and Charles A. McKnight, HY Dec. 92, p1692-1696
see Dortch, Mark S., HY June 92, p831-848

Ackers, P.
disc. (of Analysis of Spiral Vortex and Vertical Slot Vortex Drop Shafts, by Michael C. Quick, HY Mar. 90, p309-325), HY Jan. 92, p102-104

Aguirre-Pe, Julián
disc. (of Flow Resistance of Riprap, by Stephen T. Maynord, HY June 91, p687-696) with Ramón Fuentes and María L. Olivero, HY June 92, p952-954
see Fuentes, Ramón, (disc), HY May 91, p660-667

Ahmed, Shabbir
Two-Dimensional Leachate Estimation through Landfills, with Reza M. Khanbilvardi, John Fillos and Phillip J. Gleason, HY Feb. 92, p306-322

Alavian, Vahid
Density Currents Entering Lakes and Reservoirs, with Gerhard H. Jirka, Richard A. Denton, Marc C. Johnson and Heinz G. Stefan, HY Nov. 92, p1464-1489
Use of Density Current to Modify Thermal Structure of TVA Reservoirs, with Pete Ostrowski, Jr., HY May 92, p688-706

Albertson, M. L.
see Shafai-Bajestan, M., (disc), HY May 91, p579-594
see Shafai-Bajestan, M., (disc), HY Mar. 91, p303-323

Alcrudo, F.
see García-Navarro, P., HY Oct. 92, p1359-1372

Alonso, Mary L.
see Fuentes, Ramón, (disc), HY May 91, p660-667

Altınbilek, H. Doğan
see Yanmaz, A. Melih, HY Oct. 91, p1247-1268

Anderson, Clayton L.
see Blaisdell, Fred W., HY Mar. 91, p303-323

ASCE Task Committee on Geostatistical Techniques in Geohydrology of the Ground Water Hydrology Committee of the ASCE Hydraulics Division
Review of Geostatistics in Geohydrology: I. Basic Concepts, HY May 90, p612-632
disc: Zekâi Şen and Ali Subyani, HY Apr. 92, p638-640
clo: HY Apr. 92, p640-642

ASCE Task Committee on Sea-Level Rise and Its Effects on Bays and Estuaries
Effects of Sea-Level Rise on Bays and Estuaries, HY Jan. 92, p1-10

ASCE Task Committee on Sediment Transport and Aquatic Habitats, Sedimentation Committee
Sediment and Aquatic Habitat in River Systems, HY May 92, p669-687

Ashkar, Fahim
Separation of Skewness: Reality or Regional Artifact?, with Bernard Bobée and Jacques Bernier, HY Mar. 92, p460-475

Awumah, Kofi
Entropy-Based Redundancy Measures in Water-Distribution Networks, with Ian Goulter and Suresh K. Bhatt, HY May 91, p595-614
disc: Chengchao Xu and Paul W. Jowitt, HY July 92, p1064-1066

Awwad, Haitham M.
Adaptive Parameter Estimation for Multisite Hydrologic Forecasting, with Juan B. Valdés, HY Sept. 92, p1201-1221

Ayyub, Bilal M.
see Johnson, Peggy A., HY June 92, p887-903

Baines, W. D.
Destruction of Stratification By Bubble Plume, with A. M. Leitch, HY Apr. 92, p559-577

Bakker, Willem T.
see Winterwerp, Johan C., HY Nov. 92, p1508-1525

Baptista, A. M.
see Westerink, J. J., HY Oct. 92, p1373-1390

Behara, Rabindra K.
see Karki, Karam S., (disc), HY Nov. 90, p1422-1425

Bernier, Jacques
see Ashkar, Fahim, HY Mar. 92, p460-475

Best, Jim
see Ditchfield, Rowena, (disc), HY Sept. 90, p1063-1079

Bhatt, Suresh K.
see Awumah, Kofi, HY May 91, p595-614

Bhave, Pramod R.
disc. (of Explicit Calculation of Pipe-Network Parameters, by Paul F. Boulos and Don J. Wood, HY Nov. 90, p1329-1344), HY July 92, p1060-1062

Birk, Warren M.
see Leutheusser, Hans J., HY Feb. 91, p205-213

Blaisdell, Fred W.
Pipe Plunge Pool Energy Dissipator, with Clayton L. Anderson, HY Mar. 91, p303-323
disc: Emmett M. Laursen, HY Oct. 92, p1448-1449

disc: M. Shafai-Bajestan and M. L. Albertson, HY Oct. 92, p1449-1452
clo: HY Oct. 92, p1452-1453
disc. (of HGL Elevation at Pipe Exit of USBR Type VI Impact Basin, by Charles E. Rice and Kem C. Kadavy, HY July 91, p929-933), HY July 92, p1076-1077

Blumberg, Alan F.
Modeling Vertical Structure of Open-Channel Flows, with Boris Galperin and Donald J. O'Connor, HY Aug. 92, p1119-1134

Bobée, Bernard
see Ashkar, Fahim, HY Mar. 92, p460-475

Bode, Dennis
see Frick, David M., HY June 90, p733-753

Bormann, Noel E.
Scour Downstream of Grade-Control Structures, with Pierre Y. Julien, HY May 91, p579-594
disc: M. Shafai-Bajestan and M. L. Albertson, HY July 92, p1066-1068
disc: George K. Cotton, HY July 92, p1068-1070
disc: Siow-Yong Lim, HY July 92, p1070-1072
clo: HY July 92, p1072-1073

Boulos, Paul F.
Explicit Calculation of Pipe-Network Parameters, with Don J. Wood, HY Nov. 90, p1329-1344
disc: Pramod R. Bhave, HY July 92, p1060-1062
clo: HY July 92, p1062-1063

Branski, J. M.
see Sibetheros, I. A., HY Oct. 91, p1332-1351

Bratkovich, Alan
see Washburn, Libe, HY Jan. 92, p38-58

Bridge, John S.
see van Niekerk, Andre, HY Feb. 92, p246-262
see Vogel, Koen R., HY Feb. 92, p263-279

Brisbane, Thomas E.
see Abt, Steven R., HY Dec. 92, p1692-1696

Brown, G. O.
see Garbrecht, J., HY June 91, p788-798

Bühler, J.
Source Control of Intrusions Along Horizontal Boundary, with S. J. Wright and Y. Kim, HY Mar. 92, p442-459

Cabrera, Enrique
Influence of Liquid Length Variation in Hydraulic Transients, with José Abreu, Rafael Pérez and Antonio Vela, HY Dec. 92, p1639-1650

Carballada, Luis B.
see Ramamurthy, Amruthur S., HY Mar. 90, p449-455

Celik, Ismail
Suspended Sediment-Transport Capacity for Open Channel Flow, with Wolfgang Rodi, HY Feb. 91, p191-204
disc: Rasmus Wiuff, HY May 92, p823-825
clo: HY May 92, p825-827
disc. (of Entrainment of Bed Sediment Into Suspension, by Marcelo Garcia and Gary Parker, HY Apr. 91, p414-435) with Wolfgang Rodi, HY June 92, p946-947

Chang, Shou-young
see Yen, Chin-lien, HY Dec. 92, p1651-1669

Chanson, Hubert
disc. (of Uniform Aerated Chute Flow, by Willi H. Hager, HY Apr. 91, p528-533), HY June 92, p944-945

Chapman, Raymond S.
see Dortch, Mark S., HY June 92, p831-848

Charbeneau, Randall J.
see Loaiciga, Hugo A., HY Jan. 92, p11-37

Chawla, A. S.
Optimum Location of Drains in Concrete Dams, with R. K. Thakur and Akhilesh Kumar, HY July 90, p930-943
disc: V. Fiorotto, HY Apr. 92, p644-647

Chen, Cheng-lung
Momentum and Energy Coefficients Based on Power-Law Velocity Profile, HY Nov. 92, p1571-1584

Chen, Ming-Sue
see Washburn, Libe, HY Jan. 92, p38-58

Chiew, Yee-Meng
Effect of Spoilers on Scour at Submarine Pipelines, HY Sept. 92, p1311-1317
Frictional Resistance of Overland Flow on Tropical Turfed Slope, with Soon-Keat Tan, HY Jan. 92, p92-97
Scour Protection at Bridge Piers, HY Sept. 92, p1260-1269

Chirlin, Gary R.
Type Curves for a Slug Test in an Infinitely or Semi-infinitely Thick Aquifer, (*Symposium on Ground Water*, Gerard P. Lennon, ed. and Shakrokh Rouhani, ed., 1991), p169-174
err: HY Jan. 92, p119

Chiu, Chao-Lin
Variation of Velocity Distribution along Nonuniform Open-Channel Flow, with David W. Murray, HY July 92, p989-1001

Chowdhury, Jahir Uddin
Confidence Interval for Design Floods with Estimated Skew Coefficient, with Jery R. Stedinger, HY July 91, p811-831
disc: H. B. Horlacher, HY July 92, p1074-1076

Christensen, B. A.
disc. (of Calculation of Total Conveyance in Natural Channels, by J. Garbrecht and G. O. Brown, HY June 91, p788-798), HY Aug. 92, p1196-1197

Comstock, Max
see Hotchkiss, Rollin H., (disc), HY Feb. 91, p205-213

Contractor, D. N.
see Srivastava, R., (disc), HY June 91, p774-787

Cook, Christopher
see Abt, Steven R., HY May 92, p798-803

Correia, Luís R.P.
Fully Coupled Unsteady Mobile Boundary Flow Model (FCM), with Bommanna G. Krishnappan and Walter H. Graf, HY Mar. 92, p476-494

Cotton, George K.
disc. (of Scour Downstream of Grade-Control Structures, by Noel E. Bormann and Pierre Y. Julien, HY May 91, p579-594), HY July 92, p1068-1070

Creighton, David E., Jr.
disc. (of Effect of Drought on Urban Water Supplies. I: Drought Analysis, by David M. Frick, Dennis Bode and Jose D. Salas, HY June 90, p733-753), HY Apr. 92, p643-644

Croad, R. N.
disc. (of Modeling Channel Bed Transients Using Explicit F-D Schemes, by B. Morse and R. D. Townsend, HY Nov. 90, p1345-1356), HY Apr. 92, p656-659

Cronshey, Roger
see Woodward, Donald E., (disc), HY June 91, p725-737

Cullinane, M. John
Optimization-Availability-Based Design of Water-Distribution Networks, with Kevin E. Lansey and Larry W. Mays, HY Mar. 92, p420-441

Dan, Paul
see Hancu, Simion, HY Dec. 92, p1621-1638

Dargahi, Bijan
Controlling Mechanism of Local Scouring, HY Oct. 90, p1197-1214
disc: Charles R. Neill, HY Mar. 92, p504
clo: HY Mar. 92, p504-505

Davies, J. M.
see Graham, D. I., HY Sept. 92, p1270-1286

de S. Pinto, N. L.
disc. (of Air Entrainment by Spillway Aerators, by Peter Rutschmann and Willi H. Hager, HY June 90, p765-782) with S. H. Neidert and J. J. Ota, HY Jan. 92, p114-116

Degoutte, G.
disc. (of Skimming Flow in Stepped Spillways, by N. Rajaratnam, HY Apr. 90, p587-591) with L. Peyras and P. Royet, HY Jan. 92, p111-113
see Peyras, L., HY May 92, p707-717

Delo, E. A.
see Graham, D. I., HY Sept. 92, p1270-1286

Denton, Richard A.
see Alavian, Vahid, HY Nov. 92, p1464-1489

Dickey, T. D.
see Washburn, Libe, HY Jan. 92, p38-58

Dietrich, William E.
see Whiting, Peter J., HY Dec. 90, p1495-1511

Diplas, Panayiotis
Hydraulic Geometry of Threshold Channels, with Gregorio Vigilar, HY Apr. 92, p597-614
Properties of Various Sediment Sampling Procedures, with Jon B. Fripp, HY July 92, p955-970

Ditchfield, Rowena
disc. (of Development of Bed Features, by Arved J. Raudkivi and Hans-H. Witte, HY Sept. 90, p1063-1079) with Jim Best, HY Apr. 92, p647-650

Dongol, D. M.
see Melville, Bruce W., HY Sept. 92, p1306-1310

Dortch, Mark S.
Application of Three-Dimensional Lagrangian Residual Transport, with Raymond S. Chapman and Steven R. Abt, HY June 92, p831-848
err: HY Oct. 92, p1462

Driscoll, Charles T.
see Tsay, Ting-Kuei, HY Mar. 92, p407-419

Effler, Steven W.
see Tsay, Ting-Kuei, HY Mar. 92, p407-419

Ergenzinger, Peter
disc. (of Boundary Shear Stress and Roughness Over Mobile Alluvial Beds, by Peter J. Whiting and William E. Dietrich, HY Dec. 90, p1495-1511), HY May 92, p818-821

Ermolin, Yuri A.
Study of Open-Channel Dynamics as Controlled Process, HY Jan. 92, p59-72

Everett, Lorne G.
see Loaiciga, Hugo A., HY Jan. 92, p11-37

Fan, Jiahua
Reservoir Sedimentation. I: Delta and Density Current Deposits, with Gregory L. Morris, HY Mar. 92, p354-369
Reservoir Sedimentation. II: Reservoir Desiltation and Long-Term Storage Capacity, with Gregory L. Morris, HY Mar. 92, p370-384

Fan, Xiaosheng
Laboratory Investigation of Beach Profiles in Tailings Disposal, with Jacob Masliyah, HY Nov. 90, p1357-1373
disc: Charles R. Neill, HY May 92, p816-817
clo: HY May 92, p817-818

Farhoudi, Javad
Force on Slab Beneath Hydraulic Jump, with Rangaswami Narayanan, HY Jan. 91, p64-82
disc: Willi H. Hager, HY Apr. 92, p666-667
clo: HY Apr. 92, p668

Farrar, P.
see Westerink, J. J., HY Oct. 92, p1373-1390

Ferreri, Giovanni B.
Short-Duration Rainfalls in Sicily, with Vito Ferro, HY Mar. 90, p430-435
disc: W. D. Hogg, HY Jan. 92, p107-109
clo: HY Jan. 92, p109-111

Ferro, Vito
disc. (of Vertical Sediment Distribution, by Jin Ren Ni and Guang Qian Wang, HY Sept. 91, p1184-1194), HY Oct. 92, p1458-1460
see Ferreri, Giovanni B., HY Mar. 90, p430-435

Fillos, John
see Ahmed, Shabbir, HY Feb. 92, p306-322

Finnie, John I.
Solving Turbulent Flows Using Finite Elements, with Roland W. Jeppson, HY Nov. 91, p1513-1530
disc: H. Suresh Rao and S. Sankaranarayanan, HY Dec. 92, p1698-1700
clo: HY Dec. 92, p1700-1701

Fiorotto, V.
disc. (of Optimum Location of Drains in Concrete Dams, by A. S. Chawla, R. K. Thakur and Akhilesh Kumar, HY July 90, p930-943), HY Apr. 92, p644-647

Fiorotto, Virgilio
Fluctuating Uplift and Lining Design in Spillway Stilling Basins, with Andrea Rinaldo, HY Apr. 92, p578-596

Fiuzat, Abbas A.
Comparative Survey of Four Unsaturated Soil Flow Equations, with David W. Moughton, HY May 92, p786-791

Fogg, Graham E.
see Loaiciga, Hugo A., HY Jan. 92, p1'-37

French, Richard H.
Preferred Directions of Flow on Alluvial Fans, HY July 92, p1002-1013

Frick, David M.
Effect of Drought on Urban Water Supplies. I: Drought Analysis, with Dennis Bode and Jose D. Salas, HY June 90, p733-753
disc: David E. Creighton, Jr., HY Apr. 92, p643-644
see Abt, Steven R., HY Dec. 92, p1692-1696

Fripp, Jon B.
see Diplas, Panayiotis, HY July 92, p955-970

Fuentes, Ramón
disc. (of Drag Coefficient and Fall Velocity of Nonspherical Particles, by Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY May 91, p660-667) with Mary L. Alonso and Julián Aguirre-Pe, HY Nov. 92, p1589-1591
see Aguirre-Pe, Julián, (disc), HY June 91, p687-696

Galperin, Boris
see Blumberg, Alan F., HY Aug. 92, p1119-1134

Garbrecht, J.
Calculation of Total Conveyance in Natural Channels, with G. O. Brown, HY June 91, p788-798
disc: B. A. Christensen, HY Aug. 92, p1196-1197
clo: HY Aug. 92, p1197-1199

Garcia, Marcelo
Entrainment of Bed Sediment Into Suspension, with Gary Parker, HY Apr. 91, p414-435
disc: Ismail Celik and Wolfgang Rodi, HY June 92, p946-947
clo: HY June 92, p947-948

García-Navarro, P.
1-D Open-Channel Flow Simulation Using TVD-McCormack Scheme, with F. Alcrudo and J. M. Savirón, HY Oct. 92, p1359-1372

Garde, Ramchandra J.
see Kothyari, Umesh C., HY Feb. 92, p323-336
see Kothyari, Umesh C., HY Aug. 92, p1091-1106

Gartrell, Gregory
see List, E. John, HY Oct. 90, p1158-1179

Gaweesh, Moustafa T. K.
see van Rijn, Leo C., HY Dec. 92, p1686-1691

George, G. H.
Conversion Between Quadratic and Power Law for Non-Darcy Flow, with D. Hansen, HY May 92, p792-797

Gerritsen, Franciscus
see Umeyama, Motohiko, HY Feb. 92, p229-245

Ghidaoui, Mohamed S.
see Karney, Bryan W., (disc), HY Oct. 91, p1332-1351

Gill, Mohammad Akram
Numerical Solution of Muskingum Equation, HY May 92, p804-809

Gleason, Phillip J.
see Ahmed, Shabbir, HY Feb. 92, p306-322

Goodrich, David C.
disc. (of Kinematic Wave Controversy, by Victor M. Ponce, HY Apr. 91, p511-525), HY Sept. 92, p1334-1335

Goulter, Ian
see Awumah, Kofi, HY May 91, p595-614

Graf, Walter H.
see Correia, Luís R.P., HY Mar. 92, p476-494

Graham, D. I.
Measurement and Prediction of Surface Shear Stress in Annular Flume, with P. W. James, T. E. R. Jones, J. M. Davies and E. A. Delo, HY Sept. 92, p1270-1286

Guymer, I.
Longitudinal Dispersion Coefficients in Estuary, with J. R. West, HY May 92, p718-734

Hager, Willi H.
Uniform Aerated Chute Flow, HY Apr. 91, p528-533
disc: Hubert Chanson, HY June 92, p944-945
clo: HY June 92, p946
disc. (of Analysis of Spiral Vortex and Vertical Slot Vortex Drop Shafts, by Michael C. Quick, HY Mar. 90, p309-325), HY Jan. 92, p100-101
disc. (of Dividing Flow in Open Channels, by Amruthur S. Ramamurthy, Duc Minh Tran and Luis B. Carballada, HY Mar. 90, p449-455), HY Apr. 92, p634-637
disc. (of Force on Slab Beneath Hydraulic Jump, by Javad Farhoudi and Rangaswami Narayanan, HY Jan. 91, p64-82), HY Apr. 92, p666-667
see Rutschmann, Peter, HY June 90, p765-782

Hancu, Simion
Wave-Motion Stability in Canals with Automatic Controllers, with Paul Dan, HY Dec. 92, p1621-1638

Hansen, D.
see George, G. H., HY May 92, p792-797

Harada, Tatsuo
see Takahashi, Tamotsu, HY Nov. 92, p1490-1507

Hicks, F. E.
Characteristic Dissipative Galerkin Scheme for Open-Channel Flow, with P. M. Steffler, HY Feb. 92, p337-352

Hjalmarson, Hjalmar W.
New Look at Regional Flood-Frequency Relations for Arid Lands, with Blakemore E. Thomas, HY June 92, p868-886

Hjelmfelt, A. T., Jr.
see Lenau, C. W., HY June 92, p918-933

Hjelmfelt, Allen T., Jr.
Investigation of Curve Number Procedure, HY June 91, p725-737

disc: Donald E. Woodward and Roger Cronshey, HY June 92, p951
clo: HY June 92, p952

Hobbs, Benjamin F.
see Loaiciga, Hugo A., HY Jan. 92, p11-37

Hogan, Scott A.
see Abt, Steven R., HY Oct. 92, p1424-1434

Hogg, W. D.
disc. (of Short-Duration Rainfalls in Sicily, by Giovanni B. Ferreri and Vito Ferro, HY Mar. 90, p430-435), HY Jan. 92, p107-109

Holley, E. R.
see Sibetheros, I. A., HY Oct. 91, p1332-1351

Holly, Forrest M., Jr.
see Hsu, Shaohua Marko, HY Aug. 92, p1135-1152

Horlacher, H. B.
disc. (of Confidence Interval for Design Floods with Estimated Skew Coefficient, by Jahir Uddin Chowdhury and Jery R. Stedinger, HY July 91, p811-831), HY July 92, p1074-1076

Hotchkiss, Rollin H.
disc. (of Drownproofing of Low Overflow Structures, by Hans J. Leutheusser and Warren M. Birk, HY Feb. 91, p205-213) with Max Comstock, HY Nov. 92, p1586-1589

Hsu, Shaohua Marko
Conceptual Bed-Load Transport Model and Verification for Sediment Mixtures, with Forrest M. Holly, Jr., HY Aug. 92, p1135-1152

Ibrahim, Yaacob
Calibration Strategy for Urban Catchment Parameters, with Shie-Yui Liong, HY Nov. 92, p1550-1570

Jain, Subhash C.
Note on Lag in Bedload Discharge, HY June 92, p904-917

James, P. W.
see Graham, D. I., HY Sept. 92, p1270-1286

Jeppson, Roland W.
see Finnie, John I., HY Nov. 91, p1513-1530

Jirka, Gerhard H.
see Alavian, Vahid, HY Nov. 92, p1464-1489

Johns, Derek D.
see Abt, Steven R., HY May 92, p798-803

Johnson, Marc C.
see Alavian, Vahid, HY Nov. 92, p1464-1489

Johnson, Peggy A.
Assessing Time-Variant Bridge Reliability Due to Pier Scour, with Bilal M. Ayyub, HY June 92, p887-903
Reliability-Based Pier Scour Engineering, HY Oct. 92, p1344-1358

Jones, Burton H.
see Washburn, Libe, HY Jan. 92, p38-58

Jones, J. Sterling
Effects of Footing Location on Bridge Pier Scour, with Roger T. Kilgore and Mark P. Mistichelli, HY Feb. 92, p280-290

Jones, T. E. R.
see Graham, D. I., HY Sept. 92, p1270-1286

Jowitt, Paul W.
see Xu, Chengchao, (disc), HY May 91, p595-614

Julien, Pierre Y.
see Bormann, Noel E., HY May 91, p579-594

Kadavy, Kem C.
see Rice, Charles E., HY July 91, p929-933

Karim, M. Fazle
Menu of Coupled Velocity and Sediment-Discharge Relations for Rivers, with John F. Kennedy, HY Aug. 90, p978-996
disc: Scott M. Taylor and M. Gamal Mostafa, HY May 92, p812-813
clo: HY May 92, p813-814

Karki, Karam S.
disc. (of First Step Away from Lacey's Regime Equations, by Michael A. Stevens and Carl F. Nordin, Jr., HY Nov. 90, p1422-1425) with Rabindra K. Behara, HY Apr. 92, p659-661

Karney, Bryan W.
Efficient Calculation of Transient Flow in Simple Pipe Networks, with Duncan McInnis, HY July 92, p1014-1030
disc. (of Spline Interpolations for Water Hammer Analysis, by I. A. Sibetheros, E. R. Holley and J. M. Branski, HY Oct. 91, p1332-1351) with Mohamed S. Ghidaoui, HY Nov. 92, p1597-1600

Kennedy, John F.
see Karim, M. Fazle, HY Aug. 90, p978-996

Khanbilvardi, Reza M.
see Ahmed, Shabbir, HY Feb. 92, p306-322

Kikkawa, Hideo
see Sekine, Masato, HY Apr. 92, p536-558

Kilgore, Roger T.
see Jones, J. Sterling, HY Feb. 92, p280-290

Kim, Y.
see Bühler, J., HY Mar. 92, p442-459

Kleijwegt, Rob A.
disc. (of Development of Bed Features, by Arved J. Raudkivi and Hans-H. Witte, HY Sept. 90, p1063-1079), HY Apr. 92, p650-652

Koch, Gregory John
see Shen, Hsieh Wen, HY Apr. 90, p494-514

Kothyari, Umesh C.
Rainfall Intensity-Duration-Frequency Formula for India, with Ramchandra J. Garde, HY Feb. 92, p323-336
Temporal Variation of Scour Around Circular Bridge Piers, with Ramchandra J. Garde and Kittur G. Ranga Raju, HY Aug. 92, p1091-1106

Krishnappan, Bommanna G.
see Correia, Luís R.P., HY Mar. 92, p476-494

Kuhnle, Roger A.
Mean Size Distribution of Bed Load on Goodwin Creek, with Joe C. Willis, HY Oct. 92, p1443-1446

Kumar, Akhilesh
see Chawla, A. S., HY July 90, p930-943

Kung, Chen-Shan
see Yang, Xiao-Liang, HY Nov. 92, p1526-1539

Lansey, Kevin E.
see Cullinane, M. John, HY Mar. 92, p420-441

Laursen, Emmett M.
disc. (of First Step Away from Lacey's Regime Equations, by Michael A. Stevens and Carl F. Nordin, Jr., HY Nov. 90, p1422-1425), HY Apr. 92, p661-662
disc. (of Pipe Plunge Pool Energy Dissipator, by Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323), HY Oct. 92, p1448-1449
disc. (of Resistance in Flat-Bed Sediment-Laden Flows, by D. A. Lyn, HY Jan. 91, p94-114), HY Apr. 92, p662-663
disc. (of Sediment Management with Submerged Vanes. II: Applications, by A. Jacob Odgaard and Yalin Wang, HY Mar. 91, p284-302), HY May 92, p827-828

Lee, Hong-Yuan
see Yen, Chin-lien, HY Dec. 92, p1651-1669

Leitch, A. M.
see Baines, W. D., HY Apr. 92, p559-577

Lenau, C. W.
River Bed Degradation Due to Abrupt Outfall Lowering, with A. T. Hjelmfelt, Jr., HY June 92, p918-933

Leutheusser, Hans J.
Drownproofing of Low Overflow Structures, with Warren M. Birk, HY Feb. 91, p205-213
disc: Rollin H. Hotchkiss and Max Comstock, HY Nov. 92, p1586-1589
clo: HY Nov. 92, p1589

Li, Shu-Guang
Stochastic Theory for Irregular Stream Modeling. Part I: Flow Resistance, with Lakshmi Venkataraman and Dennis McLaughlin, HY Aug. 92, p1079-1090

Liggett, James A.
see Pudar, Ranko S., HY July 92, p1031-1046

Lim, Siow-Yong
disc. (of Scour Downstream of Grade-Control Structures, by Noel E. Bormann and Pierre Y. Julien, HY May 91, p579-594), HY July 92, p1070-1072

Liong, Shie-Yui
see Ibrahim, Yaacob, HY Nov. 92, p1550-1570

List, E. John
Diffusion and Dispersion in Coastal Waters, with Gregory Gartrell and Clinton D. Winant, HY Oct. 90, p1158-1179
disc: Akira Okubo, HY Apr. 92, p655-656
clo: HY Apr. 92, p656

Losiciga, Hugo A.
Review of Ground-Water Quality Monitoring Network Design, with Randall J. Charbeneau, Lorne G. Everett, Graham E. Fogg, Benjamin F. Hobbs and Shahrokh Rouhani, HY Jan. 92, p11-37

Luettich, R. A.
see Westerink, J. J., HY Oct. 92, p1373-1390

Lyn, D. A.
Density Currents and Shear-Induced Flocculation in Sedimentation Tanks, with A. I. Stamou and W. Rodi, HY June 92, p849-867
Resistance in Flat-Bed Sediment-Laden Flows, HY Jan. 91, p94-114
disc: Emmett M. Laursen, HY Apr. 92, p662-663
clo: HY Apr. 92, p663-665
Turbulence Characteristics of Sediment-Laden Flows in Open Channels, HY July 92, p971-988

Mantz, Peter A.
Cohesionless Fine-Sediment Bed Forms in Shallow Flows, HY May 92, p743-764

Mark, Ole
see Pedersen, Flemming Bo, HY Nov. 90, p1317-1328

Masliyah, Jacob
see Fan, Xiaosheng, HY Nov. 90, p1357-1373

Mastbergen, Dick R.
see Winterwerp, Johan C., HY Nov. 92, p1508-1525

Masterman, Richard
Predicting Influence of Bank Vegetation on Channel Capacity, with Colin R. Thorne, HY July 92, p1052-1058

Maxwell, W. Hall C.
see Seo, Il Won, HY Oct. 92, p1406-1423

Maynord, Stephen T.
Flow Resistance of Riprap, HY June 91, p687-696
disc: Julián Aguirre-Pe, Ramón Fuentes and María L. Olivero, HY June 92, p952-954
clo: HY June 92, p954

Mays, Larry W.
see Cullinane, M. John, HY Mar. 92, p420-441

McCorquodale, John A.
see Zhou, Siping, HY Oct. 92, p1391-1405

McEnroe, Bruce M.
Preliminary Sizing of Detention Reservoirs to Reduce Peak Discharges, HY Nov. 92, p1540-1549

McInnis, Duncan
see Karney, Bryan W., HY July 92, p1014-1030

McKnight, Charles A.
see Abt, Steven R., HY Dec. 92, p1692-1696

McLaughlin, Dennis
see Li, Shu-Guang, HY Aug. 92, p1079-1090

Melville, B. W.
Local Scour at Bridge Abutments, HY Apr. 92, p615-631

Melville, Bruce W.
Bridge Pier Scour with Debris Accumulation, with D. M. Dongol, HY Sept. 92, p1306-1310
disc. (of Study of Time-Dependent Local Scour Around Bridge Piers, by A. Melih Yanmaz and H. Doğan Altınbilek, HY Oct. 91, p1247-1268), HY Nov. 92, p1593-1595

Mendoza, Cesar
Effects of Porous Bed on Turbulent Stream Flow above Bed, with Donghuo Zhou, HY Sept. 92, p1222-1240

Mistichelli, Mark P.
see Jones, J. Sterling, HY Feb. 92, p280-290

Morris, Gregory L.
see Fan, Jiahua, HY Mar. 92, p354-369
see Fan, Jiahua, HY Mar. 92, p370-384

Morse, B.
Modeling Channel Bed Transients Using Explicit F-D Schemes, with R. D. Townsend, HY Nov. 90, p1345-1356
disc: R. N. Croad, HY Apr. 92, p656-659

Mostafa, M. Gamal
see Taylor, Scott M., (disc), HY Aug. 90, p978-996

Moughton, David W.
see Fiuzat, Abbas A., HY May 92, p786-791

Mudgal, B.
disc. (of Head Losses in Storm Sewer Manholes: Submerged Jet Theory, by Flemming Bo Pedersen and Ole Mark, HY Nov. 90, p1317-1328) with B. S. Pani, HY May 92, p814-816

Murray, David W.
see Chiu, Chao-Lin, HY July 92, p989-1001

Nakagawa, Hajime
see Takahashi, Tamotsu, HY Nov. 92, p1490-1507

Narayanan, Rangaswami
see Farhoudi, Javad, HY Jan. 91, p64-82

Naudascher, Eduard
see Nguyen, Thang D., HY Aug. 91, p1056-1076

Neidert, S. H.
see de S. Pinto, N. L., (disc), HY June 90, p765-782

Neill, Charles R.
disc. (of Controlling Mechanism of Local Scouring, by Bijan Dargahi, HY Oct. 90, p1197-1214), HY Mar. 92, p504
disc. (of Laboratory Investigation of Beach Profiles in Tailings Disposal, by Xiaosheng Fan and Jacob Masliyah, HY Nov. 90, p1357-1373), HY May 92, p816-817

Nezu, Iehisa
see Tominaga, Akihiro, HY Jan. 92, p73-90

Nguyen, Thang D.
Vibration of Beams and Trashracks in Parallel and Inclined Flows, with Eduard Naudascher, HY Aug. 91, p1056-1076
disc: Yinan Wang, HY Oct. 92, p1454-1456
clo: HY Oct. 92, p1456-1457

Ni, Jin Ren
Vertical Sediment Distribution, with Guang Qian Wang, HY Sept. 91, p1184-1194
disc: Vito Ferro, HY Oct. 92, p1458-1460
clo: HY Oct. 92, p1460-1461

Nnadi, Fidelia N.
Motion of Contact-Load Particles at High Shear Stress, with Kenneth C. Wilson, HY Dec. 92, p1670-1684

Nordin, Carl F., Jr.
see Stevens, Michael A., HY Nov. 90, p1422-1425

Obeysekera, J. T. B.
see Salas, Jose D., HY Aug. 92, p1186-1194

Obeysekera, Jayantha T. B.
see Shen, Hsieh Wen, HY Apr. 90, p494-514

O'Connor, Donald J.
see Blumberg, Alan F., HY Aug. 92, p1119-1134

Odgaard, A. Jacob
Sediment Management with Submerged Vanes. II: Applications, with Yalin Wang, HY Mar. 91, p284-302
disc: Emmett M. Laursen, HY May 92, p827-828
clo: HY May 92, p828-830

Ojha, Chandra Shekhar P.
see Swamee, Prabhata K., HY May 91, p660-667
see Swamee, Prabhata K., HY June 91, p774-787

Okubo, Akira
disc. (of Diffusion and Dispersion in Coastal Waters, by E. John List, Gregory Gartrell and Clinton D. Winant, HY Oct. 90, p1158-1179), HY Apr. 92, p655-656

Olivero, María L.
see Aguirre-Pe, Julián, (disc), HY June 91, p687-696

Ostrowski, Pete, Jr.
see Alavian, Vahid, HY May 92, p688-706

Ota, J. J.
see de S. Pinto, N. L., (disc), HY June 90, p765-782

Pacheco-Ceballos, Raul
Bed-Load Coefficients, HY Oct. 92, p1436-1442

Pani, B. S.
see Mudgal, B., (disc), HY Nov. 90, p1317-1328

Parker, Gary
see Garcia, Marcelo, HY Apr. 91, p414-435
see Sekine, Masato, HY Apr. 92, p513-535

Pedersen, Flemming Bo
Head Losses in Storm Sewer Manholes: Submerged Jet Theory, with Ole Mark, HY Nov. 90, p1317-1328
disc: B. Mudgal and B. S. Pani, HY May 92, p814-816

Pérez, Rafael
see Cabrera, Enrique, HY Dec. 92, p1639-1650

Perumal, Muthiah
disc. (of Kinematic Wave Controversy, by Victor M. Ponce, HY Apr. 91, p511-525), HY Sept. 92, p1335-1337

Peterson, Mark R.
see Abt, Steven R., HY Oct. 92, p1424-1434

Peyras, L.
Flow and Energy Dissipation Over Stepped Gabion Weirs, with P. Royet and G. Degoutte, HY May 92, p707-717
see Degoutte, G., (disc), HY Apr. 90, p587-591

Ponce, Victor M.
Kinematic Wave Controversy, HY Apr. 91, p511-525
disc: David C. Goodrich, HY Sept. 92, p1334-1335
disc: Muthiah Perumal, HY Sept. 92, p1335-1337
disc: David A. Woolhiser, HY Sept. 92, p1337-1339
clo: HY Sept. 92, p1339-1341

Prakash, Anand
Design-Basis Flood for Rehabilitation of Existing Dams, HY Feb. 92, p291-305

Pudar, Ranko S.
Leaks in Pipe Networks, with James A. Liggett, HY July 92, p1031-1046

Quick, Michael C.
Analysis of Spiral Vortex and Vertical Slot Vortex Drop Shafts, HY Mar. 90, p309-325
disc: Willi H. Hager, HY Jan. 92, p100-101
disc: P. Ackers, HY Jan. 92, p102-104
clo: HY Jan. 92, p104-107

Rajaratnam, N.
Skimming Flow in Stepped Spillways, HY Apr. 90, p587-591
disc: G. Degoutte, L. Peyras and P. Royet, HY Jan. 92, p111-113
clo: HY Jan. 92, p113-114

Raju, Kittur G. Ranga
see Kothyari, Umesh C., HY Aug. 92, p1091-1106

Ramamurthy, Amruthur S.
Dividing Flow in Open Channels, with Duc Minh Tran and Luis B. Carballada, HY Mar. 90, p449-455
disc: Willi H. Hager, HY Apr. 92, p634-637

Rao, H. Suresh
disc. (of Solving Turbulent Flows Using Finite Elements, by John I. Finnie and Roland W. Jeppson, HY Nov. 91, p1513-1530) with S. Sankaranarayanan, HY Dec. 92, p1698-1700

Raudkivi, Arved J.
Development of Bed Features, with Hans-H. Witte, HY Sept. 90, p1063-1079
disc: Rowena Ditchfield and Jim Best, HY Apr. 92, p647-650
disc: Rob A. Kleijwegt, HY Apr. 92, p650-652
clo: HY Apr. 92, p652-655

Rice, Charles E.
HGL Elevation at Pipe Exit of USBR Type VI Impact Basin, with Kem C. Kadavy, HY July 91, p929-933
disc: Fred W. Blaisdell, HY July 92, p1076-1077
clo: HY July 92, p1077

Rinaldo, Andrea
see Fiorotto, Virgilio, HY Apr. 92, p578-596

Rodi, W.
see Lyn, D. A., HY June 92, p849-867

Rodi, Wolfgang
see Celik, Ismail, HY Feb. 91, p191-204
see Celik, Ismail, (disc), HY Apr. 91, p414-435

Rouhani, Shahrokh
see Loaiciga, Hugo A., HY Jan. 92, p11-37

Royet, P.
see Peyras, L., HY May 92, p707-717
see Degoutte, G., (disc), HY Apr. 90, p587-591

Ruggaber, Gordon J.
see Tsay, Ting-Kuei, HY Mar. 92, p407-419

Rutschmann, Peter
Air Entrainment by Spillway Aerators, with Willi H. Hager, HY June 90, p765-782
err: HY Apr. 91, p545
err: HY Apr. 91, p545
disc: N. L. de S. Pinto, S. H. Neidert and J. J. Ota, HY Jan. 92, p114-116
clo: HY Jan. 92, p116-117

Salas, Jose D.
Conceptual Basis of Seasonal Streamflow Time Series Models, with J. T. B. Obeysekera, HY Aug. 92, p1186-1194
see Frick, David M., HY June 90, p733-753
see Santos, Emidio G., HY May 92, p765-784

Sankaranarayanan, S.
see Rao, H. Suresh, (disc), HY Nov. 91, p1513-1530

Santos, Emidio G.
Stepwise Disaggregation Scheme for Synthetic Hydrology, with Jose D. Salas, HY May 92, p765-784

Sasaki, A.
see Ushijima, S., HY Aug. 92, p1164-1183

Savenije, Hubert H. G.
Lagrangian Solution of St. Venant's Equations for Alluvial Estuary, HY Aug. 92, p1153-1163

Savirón, J. M.
see García-Navarro, P., HY Oct. 92, p1359-1372

Scheffner, N. W.
see Westerink, J. J., HY Oct. 92, p1373-1390

Ségol, Geneviève
The Hopscotch Algorithm for Three-Dimensional Simulation, HY Mar. 92, p385-406

Sekine, Masato
Bed-Load Transport on Transverse Slope. I, with Gary Parker, HY Apr. 92, p513-535
Mechanics of Saltating Grains. II, with Hideo Kikkawa, HY Apr. 92, p536-558

Şen, Zekâi
disc. (of Review of Geostatistics in Geohydrology: I. Basic Concepts, by ASCE Task Committee on Geostatistical Techniques in Geohydrology of the Ground Water Hydrology Committee of the ASCE Hydraulics Division, HY May 90, p612-632) with Ali Subyani, HY Apr. 92, p638-640

Seo, Il Won
Modeling Low-Flow Mixing through Pools and Riffles, with W. Hall C. Maxwell, HY Oct. 92, p1406-1423

Shafai-Bajestan, M.
disc. (of Pipe Plunge Pool Energy Dissipator, by Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323) with M. L. Albertson, HY Oct. 92, p1449-1452
disc. (of Scour Downstream of Grade-Control Structures, by Noel E. Bormann and Pierre Y. Julien, HY May 91, p579-594) with M. L. Albertson, HY July 92, p1066-1068

Shen, Hsieh Wen
Physically Based Flood Features and Frequencies, with Gregory John Koch and Jayantha T. B. Obeysekera, HY Apr. 90, p494-514
disc: Tommy S. W. Wong, HY Apr. 92, p637-638

Shimada, Masashi
State-Space Analysis and Control of Slow Transients in Pipes, HY Sept. 92, p1287-1304

Shimizu, T.
see Ushijima, S., HY Aug. 92, p1164-1183

Sibetheros, I. A.
Spline Interpolations for Water Hammer Analysis, with E. R. Holley and J. M. Branski, HY Oct. 91, p1332-1351
disc: Bryan W. Karney and Mohamed S. Ghidaoui, HY Nov. 92, p1597-1600
clo: HY Nov. 92, p1600-1603

Simons, Daryl B.
Future Trends and Needs in Hydraulics, HY Dec. 92, p1607-1620

Slingerland, Rudy L.
see van Niekerk, Andre, HY Feb. 92, p246-262
see Vogel, Koen R., HY Feb. 92, p263-279

Srivastava, R.
disc. (of Bed-Load and Suspended-Load Transport of Nonuniform Sediments, by Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY June 91, p774-787) with D. N. Contractor, HY June 92, p948-949

Staker, Kenneth J.
see Abt, Steven R., HY May 92, p798-803

Stamou, A. I.
see Lyn, D. A., HY June 92, p849-867

Stedinger, Jery R.
see Chowdhury, Jahir Uddin, HY July 91, p811-831

Stefan, Heinz G.
see Alavian, Vahid, HY Nov. 92, p1464-1489

Steffler, P. M.
see Hicks, F. E., HY Feb. 92, p337-352

Stevens, Michael A.
First Step Away from Lacey's Regime Equations, with Carl F. Nordin, Jr., HY Nov. 90, p1422-1425
disc: Karam S. Karki and Rabindra K. Behara, HY Apr. 92, p659-661
disc: Emmett M. Laursen, HY Apr. 92, p661-662
clo: HY Apr. 92, p662

Strelkoff, Theodor
EQSWP: Extended Unsteady-Flow Double-Sweep Equation Solver, HY May 92, p735-742

Subyani, Ali
see Şen, Zekâi, (disc), HY May 90, p612-632

Swamee, Prabhata K.
Bed-Load and Suspended-Load Transport of Nonuniform Sediments, with Chandra Shekhar P. Ojha, HY June 91, p774-787
disc: R. Srivastava and D. N. Contractor, HY June 92, p948-949
clo: HY June 92, p950
Drag Coefficient and Fall Velocity of Nonspherical Particles, with Chandra Shekhar P. Ojha, HY May 91, p660-667
disc: Ramón Fuentes, Mary L. Alonso and Julián Aguirre-Pe, HY Nov. 92, p1589-1591
clo: HY Nov. 92, p1591-1592

Takahashi, Tamotsu
Routing Debris Flows with Particle Segregation, with Hajime Nakagawa, Tatsuo Harada and Yousuke Yamashiki, HY Nov. 92, p1490-1507

Takizawa, Y.
see Ushijima, S., HY Aug. 92, p1164-1183

Tan, Soon-Keat
see Chiew, Yee-Meng, HY Jan. 92, p92-97

Taylor, Scott M.
disc. (of Menu of Coupled Velocity and Sediment-Discharge Relations for Rivers, by M. Fazle Karim and John F. Kennedy, HY Aug. 90, p978-996) with M. Gamal Mostafa, HY May 92, p812-813

Thakur, R. K.
see Chawla, A. S., HY July 90, p930-943

Thomas, Blakemore E.
see Hjalmarson, Hjalmar W., HY June 92, p868-886

Thorne, Colin R.
see Masterman, Richard, HY July 92, p1052-1058

Tominaga, Akihiro
Velocity Profiles in Steep Open-Channel Flows, with Iehisa Nezu, HY Jan. 92, p73-90

Townsend, R. D.
see Morse, B., HY Nov. 90, p1345-1356

Tran, Duc Minh
see Ramamurthy, Amruthur S., HY Mar. 90, p449-455

Trieste, Douglas J.
Evaluation of Supercritical/Subcritical Flows in High-Gradient Channel, HY Aug. 92, p1107-1118

Tsay, Ting-Kuei
Thermal Stratification Modeling of Lakes with Sediment Heat Flux, with Gordon J. Ruggaber, Steven W. Effler and Charles T. Driscoll, HY Mar. 92, p407-419

Umeyama, Motohiko
Velocity Distribution in Uniform Sediment-Laden Flow, with Franciscus Gerritsen, HY Feb. 92, p229-245
Vertical Distribution of Suspended Sediment in Uniform Open-Channel Flow, HY June 92, p936-941

Ushijima, S.
Prediction Method for Local Scour by Warmed Cooling-Water Jets, with T. Shimizu, A. Sasaki and Y. Takizawa, HY Aug. 92, p1164-1183

Uyumaz, Ali
Discharge Capacity for Curb-Opening Inlets, HY July 92, p1048-1051

Valdés, Juan B.
see Awwad, Haitham M., HY Sept. 92, p1201-1221

van Niekerk, Andre
Routing of Heterogeneous Sediments over Movable Bed: Model Development, with Koen R. Vogel, Rudy L. Slingerland and John S. Bridge, HY Feb. 92, p246-262
see Vogel, Koen R., HY Feb. 92, p263-279

van Rijn, Leo C.
New Total Sediment-Load Sampler, with Moustafa T. K. Gaweesh, HY Dec. 92, p1686-1691

van Rossum, Henk
see Winterwerp, Johan C., HY Nov. 92, p1508-1525

Vela, Antonio
see Cabrera, Enrique, HY Dec. 92, p1639-1650

Venkataraman, Lakshmi
see Li, Shu-Guang, HY Aug. 92, p1079-1090

Vigilar, Gregorio
see Diplas, Panayiotis, HY Apr. 92, p597-614

Vittori, G.
Flow Field Induced by Sea Waves Over Brick-Pattern Ripples, HY Sept. 92, p1241-1259

Vogel, Koen R.
Routing of Heterogeneous Sediments over Movable Bed: Model Verification, with Andre van Niekerk, Rudy L. Slingerland and John S. Bridge, HY Feb. 92, p263-279
see van Niekerk, Andre, HY Feb. 92, p246-262

Wang, Guang Qian
see Ni, Jin Ren, HY Sept. 91, p1184-1194

Wang, Yalin
see Odgaard, A. Jacob, HY Mar. 91, p284-302

Wang, Yinan
disc. (of Vibration of Beams and Trashracks in Parallel and Inclined Flows, by Thang D. Nguyen and Eduard Naudascher, HY Aug. 91, p1056-1076), HY Oct. 92, p1454-1456

Washburn, Libe
Mixing, Dispersion, and Resuspension in Vicinity of Ocean Wastewater Plume, with Burton H. Jones, Alan Bratkovich, T. D. Dickey and Ming-Sue Chen, HY Jan. 92, p38-58

Watson, Chester C.
see Abt, Steven R., HY Oct. 92, p1424-1434

West, J. R.
see Guymer, I., HY May 92, p718-734

Westerink, J. J.
Tide and Storm Surge Predictions Using Finite Element Model, with R. A. Luettich, A. M. Baptista, N. W. Scheffner and P. Farrar, HY Oct. 92, p1373-1390

Whiting, Peter J.
Boundary Shear Stress and Roughness Over Mobile Alluvial Beds, with William E. Dietrich, HY Dec. 90, p1495-1511
disc: Peter Ergenzinger, HY May 92, p818-821
clo: HY May 92, p821-823

Willis, Joe C.
see Kuhnle, Roger A., HY Oct. 92, p1443-1446

Wilson, Kenneth C.
see Nnadi, Fidelia N., HY Dec. 92, p1670-1684

Winant, Clinton D.
see List, E. John, HY Oct. 90, p1158-1179

Winterwerp, Johan C.
Hyperconcentrated Sand-Water Mixture Flows over Erodible Bed, with Willem T. Bakker, Dick R. Mastbergen and Henk van Rossum, HY Nov. 92, p1508-1525

Witte, Hans-H.
see Raudkivi, Arved J., HY Sept. 90, p1063-1079

Wiuff, Rasmus
disc. (of Suspended Sediment-Transport Capacity for Open Channel Flow, by Ismail Celik and Wolfgang Rodi, HY Feb. 91, p191-204), HY May 92, p823-825

Wong, Tommy S. W.
disc. (of Physically Based Flood Features and Frequencies, by Hsieh Wen Shen, Gregory John Koch and Jayantha T. B. Obeysekera, HY Apr. 90, p494-514), HY Apr. 92, p637-638

Wood, Don J.
see Boulos, Paul F., HY Nov. 90, p1329-1344

Woodward, Donald E.
disc. (of Investigation of Curve Number Procedure, by Allen T. Hjelmfelt, Jr., HY June 91, p725-737) with Roger Cronshey, HY June 92, p951

Woolhiser, David A.
disc. (of Kinematic Wave Controversy, by Victor M. Ponce, HY Apr. 91, p511-525), HY Sept. 92, p1337-1339

Wörman, Anders
Incipient Motion during Static Armoring, HY Mar. 92, p496-501

Wright, S. J.
see Bühler, J., HY Mar. 92, p442-459

Xu, Chengchao
disc. (of Entropy-Based Redundancy Measures in Water-Distribution Networks, by Kofi Awumah, Ian Goulter and Suresh K. Bhatt, HY May 91, p595-614) with Paul W. Jowitt, HY July 92, p1064-1066

Yamashiki, Yousuke
see Takahashi, Tamotsu, HY Nov. 92, p1490-1507

Yang, Xiao-Liang
Nonlinear Stability of Differential Surge Chambers, with Chen-Shan Kung, HY Nov. 92, p1526-1539

Yanmaz, A. Melih
Study of Time-Dependent Local Scour Around Bridge Piers, with H. Doğan Altınbilek, HY Oct. 91, p1247-1268
disc: Bruce W. Melville, HY Nov. 92, p1593-1595
clo: HY Nov. 92, p1595-1597

Yen, Ben Chie
Dimensionally Homogeneous Manning's Formula, HY Sept. 92, p1326-1332

Yen, Chin-lien
Aggradation-Degradation Process in Alluvial Channels, with Shou-young Chang and Hong-Yuan Lee, HY Dec. 92, p1651-1669

Yu, Dajin
Proposed Similarity Law for Surface Velocity in Hydraulic Models, with Weijun Zhao, HY Sept. 92, p1318-1325

Zhao, Weijun
see Yu, Dajin, HY Sept. 92, p1318-1325

Zhou, Donghuo
see Mendoza, Cesar, HY Sept. 92, p1222-1240

Zhou, Siping
Modeling of Rectangular Settling Tanks, with John A. McCorquodale, HY Oct. 92, p1391-1405